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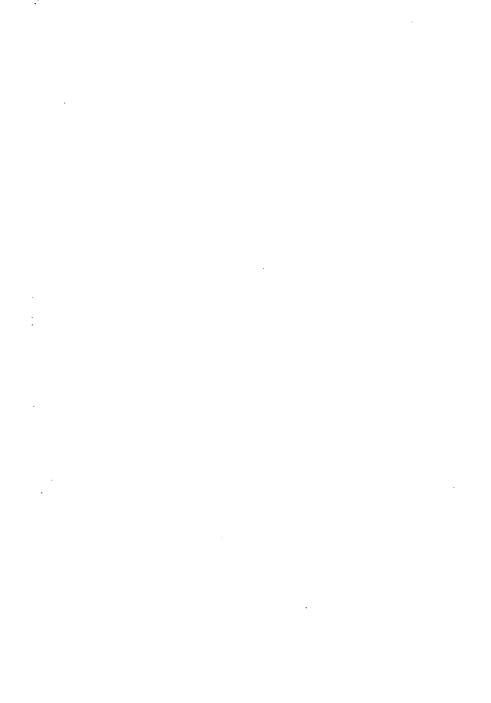
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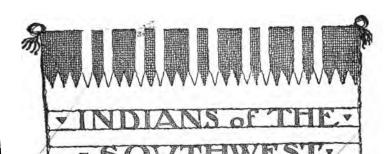
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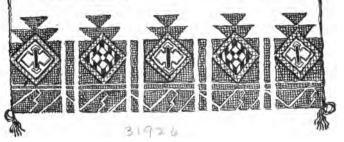
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The Lagon Ceremony, Oraibi, Arizona.

Preface

Tired, but satisfied with our journey, on December 19, 1899, Mr. Higgins, the late lamented Assistant General Passenger Agent of the Santa Fe, and I boarded the east-bound train at Winslow, Arizona. We had returned from a memorable ten days' excursion into Hopiland. As we traversed for two days the broad stretch between Winslow and Chicago, our conversation, naturally, was of the Southwest, of its wonders, of the colors of its desert, of its atmosphere so pure that one can almost see into the beyond, of its ruins of ancient cities, of its Pueblos of to-day, conservative, proud, independent, mysterious.

This was not my first journey, either to Hopiland or through the Southwest. And so, too often I found myself attempting to reply to the questions poured out in endless succession by my companion. By the time we had reached Chicago I had promised Mr. Higgins that I would attempt for him the preparation of an account of this land of which we were both so fond, explaining in popular manner the character of its peoples, and pointing out how they and their ruins might most easily be visited. The sketch, we mutually agreed, should be accompanied by many photographs, which would present characteristic views, and by one or more maps whereupon might be seen the linguistic relationship of living peoples and the routes by which these peoples might be reached.

Since that visit, in 1899, I have paid other visits to the Southwest, but the fulfilment of the promise made at that time has been delayed from season to season. In August, 1901, on the occasion of the weird snake ceremonies, it was my good fortune again to visit the Hopi, this time in company with Mr. Higgins' successor, and with him the subject was renewed and the promise reiterated, with this paper on The Indians of the Southwest as the result.

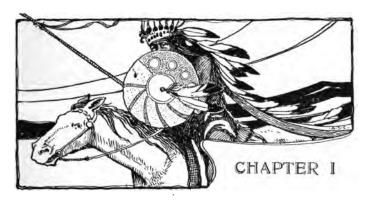
If we may better understand civilized man of to-day by a knowledge of man in more primitive conditions, then surely the Southwest forms a field, not only to scientific students but to all who have a broad interest in mankind, second to that presented by no other region in the world.



Part of Line of Ponca Sun Dancers, July, 1902.



Arapalio Sun Dance Priests Attired in Ghost Dance Costume.



Introduction to the Southwest

Journey Begun — Plains Tribes of Oklahoma — Kaw — Tonkawa — Osage —
Ponca and Oto — Pawnee — Sauk and Fox — Kickapoo, Shawnee and
Pottawatomie — Cheyenne and Arapaho — To New Mexico



Y the Unlimited we may leave Chicago at 10 o'clock in the evening of any day, for the Unlimited runs seven times a week. There is also the Limited, a train de luxe, which makes better time; but there is something incongruous in the very name "Limited" with the vastness of this out-of-doors country; hence, in our journey of observa-

tion among the aborigines, I have chosen that we shall use the schedule of the all-comers train—No. 1, as it is called on the official calendar.

The impedimenta of the journey need not be extensive—any old clothes and change. Silver will be required, and we had better provide ourselves with it along the line of the railroad, for the supply on hand in the till of the Indian trader is usually small. There was a time when the journey along the line of the old Santa Fé trail demanded an outfit, with a wagon and mules; but while an "outfit" may be found useful in some of the later stages of the journey, the subject will receive no further consideration at present.

With the understanding that we are to leave Chicago to-night, we may expect to find ourselves along in the afternoon of



Haskell Institute, Indian School, Lawrence, Kansas.

to-morrow in just about the center of Kansas. To one seeking evidences of America's former denizens there is very little in Kansas at the present day to remind him that we are now in the midst of the home of the Great Plains Tribes, and that over this country, less than fifty years ago, ranged bands of Cheyenne, Arapaho, Kiowa, Pawnee, Osage and other tribes of Indians. In fact, from anything we may see from the car window to-day, the inference might be drawn that these tribes have ceased to exist. Such an inference, however, would not be true, though the country is so thickly settled and so entirely given up to agricultural pursuits that it is difficult to believe that over these broad prairies was formerly the home of many tribes well known to history. Such were the Oto, Missouri and Kaw in northeastern, the Chevenne and Arapaho in western, the Kiowa in southwestern and the Osage in southeastern Kansas. we were to leave the main line of the Santa Fe at Newton we would find ourselves in the midst of a territory which has been the scene of many a conflict among the Pawnce, the Kiowa, the Osage and the Kaw, who found in this region a debatable and hence a fighting ground. Should we take the branch of the Santa Fe System which, starting at this point, turns directly south, passing through Wichita, extending across the Territory of Oklahoma, and continuing on through Fort Worth to Galveston, we should find lying along both sides of this division many tribes of Indians which, contrary to the popular belief,



Chilocco Indian Industrial School, Oklahoma.

are not only interesting to the student of ethnology, but which retain a vast number of old-time customs and ceremonies of the greatest interest to the tourist.

Kaw or Kansa

Leaving Newton early in the morning, we have passed into Oklahoma, where before noon we may break the journey at Kildare, whence a stage ride of thirteen miles brings us to the agency of the Kaw, numbering to-day some two hundred people. These Indians form a minor division of the great Siouan stock, which has left such an impress upon the early history of the West. The Kaw to-day receive regular annuities from the Government in payment of land, and hence are able to afford many luxuries. In spite of this purchased veneer of civilization, they still construct their old-time brush lodges and summer arbors and continue many of their dances.

Tonkawa

Back to the railroad again, we take the train for Ponca, seven miles south of Kildare, where, within twelve miles, are the remnant of the Tonkawa. The Tonkawa are interesting for two reasons. In the first place, the language which they speak is unlike any other tongue of aboriginal America, and they form consequently a distinct linguistic stock. In the second place, they were in former times one of the extremely few bands of North American Indians which practiced cannibalism. Some of them still occupy the dome-shaped grass houses, and many ceremonies survive.

Osage

Ponca is also at the head of an interesting stage route,

about seventy miles in length, leading to Pawhuska, the chief city of the Osage. The road passes through the sub-agency at Gray Horse, and extends over half the distance across the Osage nation, Pawhuska being situated near the center of the reservation.

The Osage are popularly known as the aristocrats of American Indians, and it



requires only a very superficial acquaintance with them to realize that they have long been accustomed to the possession of considerable quantities of money. In Pawhuska we are many times afforded the incongruous sight of a stalwart Osage, his feet incased in moccasins, his body wrapped in a blanket, his shaven head uncovered, driving into town with his entire family in a comfortable modern carriage. Nevertheless, the Osage still form an extremely conservative nation, many of them living in summer in the old elliptical brush houses. They are famous dancers and horse racers, and during many months of the year gather in camps where dances of many varieties are prolonged far into the night, and where they play native games and sing songs of a former age and "smoke away" ponies.

The Osage having had in recent years an abundance of the good things of this life, never became interested to any great extent in the so-called Messiah or Ghost Dance religion which eleven years ago spread with such rapidity among the plains tribes. One band, however, has recently taken up the peyote or mescal rites which they borrowed from the Kiowa. Parts of the Osage country are hilly and extremely wild and picturesque. Game is to be found in profusion.

Ponca and Oto

Returning to Ponca, we again travel south by train and find within easy distance, and reached respectively from White

the Ponca and Oto, who together own large sections of land in Noble county. These two tribes are also members of the great Siouan family, and preserve its conservative traditions, as they still retain many wild and savage dances and occupy the tipi or brush houses and dugouts for a considerable portion of the year. Among them also the medicine man still performs his magic rites of healing, and among the former tribe the so-called Sun Dance is performed in August of each year.

Eagle and Red Rock stations, the two agencies of



Pawnee

Continuing south by train, we next stop at Guthrie, the capital of the Territory, where, by a ride of seventy-three miles on a branch road of the Santa Fe, we reach the city of Pawnee. This ride of three hours is, in part, at least, one of the most pleasant to be found in the Territory. The road follows the tortuous course of the Cimarron River, passing through great groves of cottonwoods and forests of pecan trees, to which, late in the autumn, after the leaves have fallen, great clusters of mistletoe cling.

One would hardly suspect from the appearance of the modern and enter-



Smoke Offering, Pawnee Medicine Men's Ceremony.

prising young city of Pawnee that there is in its neighborhood all that remains of a once great nation. Although broken in spirit and dwindled in numbers to a scant six hundred, we find the Pawnee well worthy of a visit. Their struggle against the encroachment of a new and strange civilization which has surrounded and hemmed them in is one of the most remarkable made by any tribe in America.

The Pawnee still retain their four tribal divisions, and near the city are the Skidis or Pawnee Loups, the Chaui or Grand Pawnee, the Kitkehahki or Republican Pawnee, and the Pitahauerat or Tapage Pawnee. Of course, these tribes have long since been allotted quarter sections of land, but the Pawnee, like his other brothers of the plains, was by birth a hunter and a warrior, and the process of converting him into a farmer has been one of extreme difficulty.

To speak of only a few of the many interesting features of the Pawnee would transcend the limits of this section. They are among the most conservative of all the tribes, and retain a vast number of customs and rites which make them worthy a visit. Here may be seen one of the great earth lodges, the most remarkable structure produced by the primitive Indians of any part of the United States. Gathered around the earth lodge they camp in tipis, where they still indulge in

native games and dances, and where still exist many ancient ceremonies, with elaborate rituals.

Sauk and Fox, Kickapoo and Shawnee

To visit the tribes south of the Pawnee and to the east of the main line of the Wichita and Fort Worth division of the Santa Fe, one may retrace his steps from the town of Pawnee to Ripley, lying about half way between Pawnee and Guthrie, where he is within short driving distance of the northern of the two bands of the Sauk and Fox Indians.

The journey may be continued from this point, by rail, southward across Lincoln county to the town of Shawnee, passing en route the southern band of the Sauk and Fox.

From Shawnee the camps of the Kickapoo, Shawnee and Pottawatomie are easily reached.

The four tribes just named all belong to the great Algonquian linguistic family, one of the largest and most widely distributed of all aboriginal families on the American Continent. The Indians first encountered by the Pilgrim Fathers in Massachusetts were members of this great stock. Although these tribes now occupy farm lands and are outwardly civilized, they all retain many old customs and manners. Thus one may still see the Sauk and Fox dwelling in their old-

fashioned elongated lodges covered with mats, or the shorter but still elongated rush lodges of the Kickapoo.

Many of their ancient games have been preserved, along with a number of religious ceremonies which are still performed on stated occasions during the year. In a tour of observation such as has been pointed out one may gain an idea of the manner in which the Indians lived in the territory east of the Mississippi before the advent of the whites.

Returning to Oklahoma City and continuing on the same train to El Reno, we are within easy driving distance of several large and important tribes.



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Chevenne and Arapaho

Five miles to the northwest of El Reno is the Agency of the Cheyenne and Arapaho, who have their claims along the North Fork and the Canadian River, extending westward more than sixty miles. The Cheyenne and Arapaho both speak dialects of the great Algonquian tongue and have been close friends since before the dawn of written history. Both tribes are extremely conservative. Although friends and allies, both in peace and in war, and although they are so closely allied in their language, they present many points of difference in character. The Cheyenne have always been noted for their proud



Chevenne in Dance Costume.

and dignified bearing, for their honesty, for their truthfulness, fearlessness, and for the morality of their women. In their early conflict with the whites they left behind them a trail of blood in their attempt to escape the mantle of civilization which the Government finally thrust upon them. In physique they present a striking and commanding appearance, second to no other tribe as specimens of the noblest physical type which North America produced. The Arapaho, equally striking in physique, have never presented a hostility to the whites comparable with that of the Cheyenne; nor are they so reserved or haughty in bearing.

Both of these tribes still retain the conical tipi, the brush wind-break and the summer arbor. They are still accustomed to gather as a nation, during the summer, in one great camp pitched in the form of an immense circle, in the center of which is the great lodge of cottonwood poles, where they perform the rites of the so-called Sun Dance.

The Sun Dance is the great ceremony of practically all of the Plains Tribes; but, in spite of its repeated observance by the whites, its true character has rarely been understood, and on the majority of reservations its celebration has been prohibited by the Department of Indian Affairs.

Close examination of this ceremony reveals the fact that it is a dramatization of the ritual of the origin of Creation. It is a purely religious ceremony, during the performance of which traditional sacred songs are sung and many prayers are offered to the Great Father for spiritual and temporal blessings. It is one of the few ceremonies which bring the entire tribe together, and during the performance of which all personal animosities and jealousies are laid aside. That it has come under the ban of the government is due largely to the fact that in former times there was a certain amount of torture in connection with the ceremony, and to the further fact that the Sun Dance was often a preliminary to war.



Half of Line of Dancers, Arapaho Sun Dance.



Kiowa Camp, near Ft. Sill.

The Sun Dance is still given during one of the summer months by both Cheyenne and Arapaho, and so firmly convinced are the chiefs of both tribes of the value of this ceremony as a power for good, that it seems likely it will continue to be given for many years.

Among both Cheyenne and Arapaho the religion of the Messiah a few years ago made great advance, and one may still witness from time to time on this reservation the interesting Ghost Dance.

By rail from El Reno to Chickasha is but an hour's run, where we are within easy distance of the Kiowa-Comanche-Apache and the Wichita reservations. Farms have been allotted to these Indians and the remaining lands thrown open to settlement. Both reservations are most easily reached by taking a branch road from Chickasha to Anadarko, less than twenty miles. South of this newly made city lies the great Kiowa-Comanche-Apache Reservation, where we may find over a thousand Kiowa and nearly fifteen hundred Comanche, with two hundred Apache, who, with the incorrigible Geronimo, were taken to this reservation by United States troops.

Kiowa

This tribe has long been known for its fierce and savage raids, made, up to within thirty years ago, north through



Kiowa Woman and Child.

Kansas and into Nebraska, south through Texas, west into New Mexico, and southwest far into Old Mexico.

Of the dignity or honesty of the Kiowa not much may be said. They are among the most typical of the Plains Indians; roaming from place to place, often on the warpath and never at rest, they have been aptly termed "the Bedouins of the Plains." They are peculiar in that so far as is known they have no linguistic connection with any other race, forming within themselves a distinct linguistic family. The Sun Dance is a sacred ceremony among the Kiowa.

Comanche

This once mighty and warlike tribe still exists in a numerous band on this great reservation, but has lost not only all of its former ferocity, but practically all of its old-time customs. The Comanche

are interesting to the student of ethnology, inasmuch as they speak a dialect of the Shoshonean tongue, their true home being on the oases of the great plateau extending from the western foothills of the Rocky Mountains to the eastern slopes of the Sierra Nevada. The Comanche, however, have become true Plains people, like the Kiowa, with whom they have been closely confederated for many generations.

Wichita

Just north of the Washita River, which forms its southern boundary, is the Wichita Reservation, where we find, in addition to several small tribes, two large groups of Indians comprising the larger part of the so-called Caddoan stock, of which the Pawnee form the eastern branch. These are the Wichita and Caddo, tribes which have wandered up from the southern region of Texas and Louisiana into the plains.

Black Coyote, an Arapaho Ghost Dancer, and his Tipi.



The Wichita to-day number about a thousand and form one of the most interesting groups of people to be found in Oklahoma, or in fact, within the limits of the Mississippi drainage basin. Many of the families live in domeshaped lodges of grass, like the village on the North Fork, which Catlin painted in 1834. The Wichita have always been an agricultural tribe, and still retain a large number of ancient rites. Here many forms of ceremonial games survive, dating back to ancient times when games were played as processes of divination, and had not yet degenerated into the ordinary forms of gambling such as are found to-day among many tribes of the West and Northwest.

The mythology of the Wichita, like that of many other tribes of this region, is extremely beautiful, but is as yet practically unstudied, an almost virgin field for the investigator.



Big John, a Comanche Chief.

Caddo

This quiet and reserved band, numbering to-day a little over five hundred persons, although closely allied to the Wichita, do not retain nearly the number of ancient customs that may be found among the latter tribe. The original home of the Caddo was on the banks of the lower Red River in Louisiana, afterward for a while on Caddo Lake near the boundary

between Louisiana and Texas. Here they came in early contact with the whites, one of their tribes being mentioned by the narrator of De Soto's expedition. The Caddo retain many traces of their southern home, being smaller and darker than their neighbors of the Plains, and practicing the peaceful pursuits of agriculture. It is their boast that they have never shed white man's blood, though they are noted for their courage. They have long since given up the conical grass house such as is still occupied by the Wichita, and live, as a rule, in log houses modeled closely after those of the whites.



Kiowas.



Kiowa Maiden, Wearing Elk Tooth Dress.

Delaware

It is not generally known that a small remnant of this once celebrated tribe still exists on this same reservation, where they have found, in all probability, their last home, after many years of vicissitudes and wanderings. In spite of contact with the whites through several generations, they retain certain old customs, even occupying their old-time conical houses.

With this hurried glance at many important tribes—during a visit to each of which we have seen strange and unique forms of habitations, curious dances and interesting ceremonies;

among whom we may yet find people wearing buckskin garments and adorning the walls of their lodges with the Sacred Bundle, or guarding the household from invisible enemies by the buffalo shield which hangs on its tripod back of the lodge—we return to Newton, where we once more join the main line of the Santa Fe and hurry across the plains of Kansas to the west.

To New Mexico

Through this country of farms, over which we pass so rapidly and with such little concern, was the route taken by Coronado in his memorable march of 1540 in search of the Gran Quivera. Prosperous Dodge City, in western Kansas, was the headquarters for awhile of that well-known Indian fighter, General Custer.

When we stop for breakfast at La Junta on the second morning, we are still in the midst of a vast sea of prairie, but a certain sharpness and clearness of the atmosphere is at once noticed. Before we halt at the next Harvey hotel for our noonday meal we shall have our first glimpse of the Rocky Mountains, rising in an apparently straight line before us at the west, the peaks covered with snow; while soon to the south of us the Raton Range looms up as though to hem us in. Starting from Trinidad, at the foot of this range, we begin scaling this first real mountain barrier to western progress, the summit

of which we finally pierce by means of a tunnel at an elevation of 7,608 feet.

We are now fairly in New Mexico, and for several miles descend through the picturesque scenery of the head waters of the Canadian River. Crossing several other smaller divides during the afternoon, we continue in a southwestern course until we reach Las Vegas. Shortly after leaving this city, and after crossing several small mountain streams, we begin ascending another divide, following the course of the Pecos River, and soon pass near by the ancient pueble of Pecos, the research

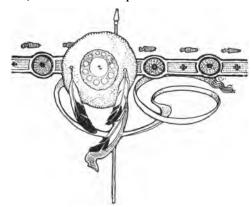


Wichita Women Building a Grass House.

by the ancient pueblo of Pecos, the ruins of which may still plainly be seen from the car window. A few miles further on we leave the summit of the Glorieta Mountains, the western descent of which is made along the valley of the Galisteo, a tributary of the Rio Grande. We are now at the threshold of the real southwest, the home of the Cliff Dwellers of the past and the Pueblo peoples of to-day.

As the City of Santa Fé may be regarded as the logical starting-point for an excursion to the first group of points of interest relating to aboriginal man in the Southwest, we may break our journey at Lamy, and take the train for Santa Fé, New Mexico's capital, one of the oldest cities of the United States. Here we shall find several good hotels.

As we shall have ample time later on to see this quaint old town, we will do nothing more to-night than stroll to the plaza, where, as we listen to the band and watch the faces of the groups of people, we shall hear a strange tongue, and we may easily imagine ourselves transported beyond the confines of the United States, into Mexico or Spain.



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Southwest Peoples, Tribes and Linguistic Stocks

City of Santa Fé — Pueblo Peoples, Tafioan, Keresen, Zufiian, Hopi — Non-pueblo Peoples, Navajo, Apache, Yuma, Pima — California Tribes.

ANTA Fé being situated within the Pueblo country, and built as it is near the ruins of an ancient Indian pueblo, naturally possesses much to interest one in its collections of ancient and modern antiquities. Consequently we may begin our ramble by a short visit to the old municipal building or palacio on the north side of the square.

Within, in the rooms of the historical society, we shall find a somewhat scant collection of curios. The building itself, with its many memories of former days, is more interesting and contains, so it is said, a mine of manuscripts and documents relating to the early history of Spanish America well worth the serious attention of any student desirous of pursuing original investigation.

Having paid our respects to the palacio we cross the plaza by the diagonal path toward the southwest, and walking down a



Old Curiosity Shop, Santa Fé.

little narrow street for a couple of blocks, where signs in an unfamiliar language confront us at every step, we soon arrive at Santa Fé's best known institution—the Old Curiosity Shop of a leading merchant. While there is much of the unimportant here, there is also much that is valuable, and

as a rule the proprietor may be depended upon for knowing the value of such things. Our first impression on looking around the closely packed walls of this elongated establishment is that we are in a land of potters; for probably half the objects within the shop are earthenware vessels; the other half comprises objects of stone, blankets, baskets and beadwork on buckskin. In this very miscellaneous collection we shall find something from nearly every tribe in the Southwest. To continue our observations of these objects with greater intelligence it will be best perhaps to take a comprehensive survey of the character of the aboriginal life which spreads out from this point, north to the southern borders of Colorado, Utah and Nevada, south to the Republic of Mexico, and west to the Pacific Ocean.

This is the Southwest. Within this region of approximately two hundred thousand square miles we shall find ruins of every description, some minute, others extensive and numbering literally thousands; and we shall also find about forty-five tribes or villages, representing nine linguistic stocks. As with our present insufficient knowledge we can not make a scientific classification of the ruins, we may here confine our attention to living tribes. These we may divide into two comprehensive groups: (1) The Pueblo Peoples; and (2) The Non-pueblo Peoples.



Governor's Palace, Santa Fé.

The Pueblo Peoples

The Spanish name *pueblo* was applied by the conquistadores to the native village communities which they found in New Mexico and Arizona, and it has tenaciously clung to these villages since that time; in fact we not only speak of the pueblo peoples or the pueblos, but also of the pueblo area and the pueblo culture; for the peoples have much in common.

It is said that an early enumeration of the inhabited pueblos about the middle of the sixteenth century placed the number at sixty-five, but at the present time the permanently occupied villages number only twenty-six. There seems to be no doubt that this number will greatly decrease; for with certain of the Rio Grande pueblos at least there has been no progress and there is going on to-day a slow but sure Mexicanization, so that within a comparatively short period certain Indian villages will cease to exist as such. We shall see later that the number of pueblos once greatly exceeded those enumerated by the early Spaniards. Some of the ancient pueblos were exceedingly small, while others were fully as large as the largest present inhabited pueblo.

We may characterize Pueblo Indians in general as dwellers in compactly built, substantial villages with houses rising from one to five stories in height, and bordering on more or less regular streets or courts. In character they are peaceful, industrious and conservative. The occupation of the men is largely confined to agriculture; they also do all the spinning, weaving and manufacturing of garments, which are of cotton or wool. The women are the house builders and owners, and in addition to the routine of household work, they engage extensively in the manufacture of pottery.

As a rule the Pueblos are an intensely religious people and devote much of their time to the performance of elaborate ceremonies in which, owing to the aridity of the climate and to the fact that their food supply



Burro Alley, Santa Fé.

consists very largely of corn, prayers for rain predominate. The harshness of the desert has played a very large part in pueblo ritual and ceremoniology. While certain villages are located in plains, others are perched upon lofty and precipitous tablelands; in both cases provision for defense has been carefully planned, the idea of defense seeming to have been one, if not the predominating, motive in their original choice of a habitation. The selection of the location has also been largely influenced by the accessibility of springs. Finally, we may hope to discover among the pueblos that richness and completeness of aboriginal life which, in certain pueblos at least, has been preserved until to-day with but little foreign influence.

The twenty-six inhabited pueblos are divided on a linguistic basis into four groups, the Tañoan, the Keresen, the Zuñian and the Shoshonean or Hopi.

Of these four linguistic stocks the Tañoan is the largest and comprises the following villages: Picuris, Pojoaque, Tesuque, Santa Clara, San Juan, San Ildefonso, Taos, Jemez, Sandia, Nambe, Isleta and Hano. Of these twelve villages all except the four last named are most easily reached from the city of Santa Fé.

The villages speaking a Keresen dialect are Cochiti, San Domingo, San Filipe, Santa Ana, Sia and Acoma. Cochiti, San Domingo and San Filipe are within easy driving distance of Thornton; Sia and Santa Ana may be easily reached from Albuquerque, while Acoma lies further to the west and may be reached from Laguna.

Representatives of the Zuñian stock are confined at the present time to the large pueblo of Zuñi and its dependent towns, lying forty miles south of Gallup.

The Hopi villages, six in number and the only pueblo representatives of the great Shoshonean stock, lie seventy-five miles north of Winslow, Arizona, and comprise all of the living representatives of the pueblos in Arizona except the Tañoan pueblo of Hano, which lies within the limits of the Hopi villages.

The Non-pueblo Peoples

Although inhabitants of the same desert, and subject in general to a similar environment, the peoples grouped under the term Non-pueblo are very different, not only in language, but in their customs and manners, from those which we have just recently characterized. Many of these non-pueblo peoples of the Southwest, although now perfectly acclimated, seem to be intruders, as in fact they are, and consequently their culture partakes somewhat of the nature of nomads. Instead of the carefully constructed and substantial dwellings in compact villages of the Pueblo Indians we find in this group of peoples little or no village life, the families of the different tribes being scattered here and there over the desert, and dwelling in more or less rude, temporary structures during winter, and in exceedingly primitive shelters during the summer.

While agriculture among them plays no mean part, it is not practiced to the same extent as among the pueblo peoples. We find the women manufacturing little or no pottery, for the perfection of the potter's art is reached only among sedentary peoples. On the other hand, among many of these tribes the art of basketry is very highly developed. We find also that the character of the costume has changed, and instead of the beautiful woven garments, buckskin is substituted, or, in early times among the peoples of Arizona and California, scant garments of shredded bark. While these non-pueblo peoples have a serious and more or less extensive system of theology, it is rather of the medicine man than of the priest. The production of elaborate religious ceremonials, with accompanying altars and extensive religious paraphernalia, requires proper temples and close village communities.

The non-pueblo peoples embraced within the scope of this paper comprise representatives of the Athapascan, Piman. Yuman and Shoshonean stocks. The representatives of the Athapascan stock are the most numerous and interesting; they comprise two well-known groups of peoples, the Apache and Navajo. The Apache occupy four reservations,—the Jicarilla in northwestern New Mexico, the Mescalero in east central New Mexico and the White Mountain and San Carlos Apache in south central Arizona.

The Navajo is not secondary in general interest to the tribes just mentioned. These wanderers of the desert, numbering over





An Ancient Adobe.

fifteen thousand souls, are confined on a single large reservation in north central Arizona, and a part of their country must be crossed in the journey to Hopiland.

Did we but know of their wanderings and the causes which forced these four bands of Apache and this great band of Navajo to separate from their kindred in the far North, along the banks of the Mackenzie River and the

shores of the Great Lakes, we would have one of the most interesting stories of tribal migration ever recorded. When this migration began we do not know, but the Apache and Navajo in their southern flight across the continent suffered to no great extent. We are sure that in their present home they have for hundreds of years maintained a warlike and hostile disposition and have been a great trial to the peace-loving village Indians.

Passing on toward the west we next encounter the tribes of the Yuman stock, comprising the small band of the Havasupai north of Ash Fork in the Cataract Canyon, the Walapai further to the west along the bank of the Grand Canyon, and the Mohave on the arid banks of the Colorado. Further south we find the Yuma proper, in southwestern Arizona, while to the east of them are the Maricopa, and finally, the Diegueno, now occupying several small reservations in southern California among the so-called Mission Indians.

In close proximity to the Yumas are the tribes of the Piman stock. Of this family, however, our interest is confined to two tribes, the Papago and Pima, who have their homes in southern Arizona. The other tribes of this stock, such as the Tarahumara, Tepehuana, etc., occupy the mountainous regions in northwestern New Mexico.

We have finally to notice several scattered tribes of the great Shoshonean stock, which, as has been said, includes the Hopi and extends on the north from Idaho to southern California on the south. The most interesting representatives of this stock apart from the Hopi, and which for our purposes are best classified with the pueblo peoples, are to be found among the Mission

Indians of southern California. Here we find three fairly well defined groups, the Coahuila, the Seranno and the Luiseno.

In addition to the three groups of Mission Indians of the Shoshonean stock we have also in that almost unexplored region lying to the east of the Santa Fe lines in California and between Tehachapi Pass and Tulare Lake, many small and imperfectly known groups comprising remnants of this great stock, which in ancient times pushed their way over the almost impassable crest of the Sierra Nevada, and conquered the less warlike tribes which in much earlier times had made their homes in the secluded valleys lying on the western slopes of the Sierras.

The art of basketry among these people was carried to a high stage of development, and fortunate the tourist considers himself who to-day is able to buy an old, time-stained basket from the palmier days, when the finished product represented an intrinsic part of the life of the maker.

Lying to the north of these Shoshonean tribes and still to the east of the Santa Fe, their boundary being the Sierras on the east, the Coast Range on the west and the Cosumines River on the north, we find innumerable small bands of Indians representing two stocks which, in former times, must have been exceedingly numerous, but which to-day are chiefly interesting to tourists, on account of their wonderful baskets. Of these two stocks that of the Mariposan occupies the southern half of the territory just defined, while to the north is the territory of the tribes of the Moquelumnian stock.

Naturally the general remarks made at the beginning of this section concerning the tribes of the non-pueblo group do not apply to the Californian tribes. Among these Californian tribes we find little or no agriculture practiced. In their habitations there is a tendency toward permanency, while the gay plumage of the birds of this land of enchant-

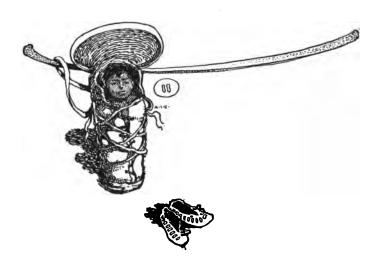
ment gives a color and brilliancy to their ceremonial costumes which is quite in striking contrast to the general somberness of the non-pueblo peoples of the southwest desert.

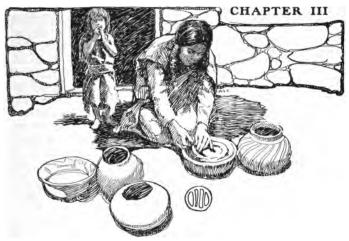
In this brief survey of the Southwest tribes it has



Yucca, Typical of the Desert.

not been possible to give more than a mere outline. Later, as we continue our journey westward from Santa Fé, we shall become better acquainted not only with the desert and the valleys, but with their inhabitants. At any rate we are now prepared to examine understandingly the treasures which are set forth on the shelves of the various curio stores and museums; and when told that this, for instance, is a pottery idol from Tesuque, this a ceremonial kilt from the Hopi, this a basket of the Pima and this a feathered head-dress from the Mariposans, we have a better idea as to the location of the makers of these things. In these days of the close proximity of the trading-post, the Indian has learned the purchasing power of silver, and as a rule he is not unwilling to part, for a consideration, with his household gods and other prized possessions.





Three Southwestern Industries

 ${\bf Basketry-Pottery-Weaving}$

HE three great industries of basketry, pottery and weaving form an important part of the daily life of the people of the Southwest. Objects which are most likely to interest the average traveler, and especially which he is most likely to be able to secure, belong to one or another of these groups. Furthermore, the distribution of

these objects is so wide-spread and there is so much in common in their manufacture, that it seems proper at this point, and before we begin the actual tour of investigation, to pause a moment longer and consider these three great industries in detail.

Naturally the basketry, pottery and textiles of the Southwest differ very much from village to village and from tribe to tribe; but at the same time the objects of each one of these groups in all the villages have something in common. It will not be necessary to devote further attention to this phase of the subject in the succeeding sections.

Basketry

Not until we have reached the borderland of California do we come close to the peoples who make really remarkable baskets. There are, however, many baskets made in both New Mexico and Arizona, and among these are forms highly prized for use in decorative art. The art of basketry is not practiced to any great extent among any of the pueblo peoples except the Hopi.

Among the Hopi we find both types of basketry, the woven and the coiled. Of the former are the numerous shallow trays and baskets, woven in large numbers in practically all of the villages, which serve for a multitude of purposes. Such are the curiously made trays used as sieves or as receptacles for corn. These are usually made of the split stem of the yucca plant. Another basket of the so-called wickerwork weave (a variety of woven basketry, in common use by the Hopi, and to be found in nearly every house) is the large carrying basket used for packing corn, firewood, etc. None of the baskets so far mentioned among the Hopi have any distinctive decorative value, and as a consequence are not sought after by collectors. Flat, rectangular shaped trays of the diagonal or twilled variety of woven baskets are generally used as receptacles for the thin waferlike bread as it is lifted from the piki stone.

There is made of the dyed stems of Bigelovia graviolens, at Oraibi, a type of woven basket, in shape like a shallow tray. These are uniform in shape, but vary considerably in size. The ornamentation varies from geometric patterns to the well-known Hopi symbols, such as rainclouds, squash blossoms, and the more beautiful and complicated designs representing Katcinas or masked personages.



Similar in shape to these plaques, but woven in an entirely different manner, are the beautiful and equally well-known plaques made on the Second Mesa. The method of weaving here employed is that known as the coiled. It is peculiar, however, inasmuch as it has a grass coil foundation, consisting of a thick bundle of woody yucca stems, a small fragment of the split leaf furnishing also the sewing material. In all America this type of basketry is found only among the villages of the Second Mesa; but it is a common type in Northern Africa. Not only are trays made after this fashion on

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this Mesa, but occasionally baskets may be found similar in shape to the wide-mouthed earthenware vessels.

One of the interesting types of basketry widely distributed in the Southwest is the so-called water bottle. This is made in a variety of forms, some of them being even jug shaped. The character of the weaving is of the coiled type, and when the vessels are especially designed for carrying water, they are treated to a thick coat of pine pitch, both within and without, which renders them water-tight. The best specimens of this type of basketry are made by the Paiute. These baskets are made by the Havasupai, the Walapai and by all of the tribes of the Apache.

The baskets of the Mescalero and Jicarilla Apache, that is, of the New Mexican Apache, are similar in form, being usually shallow and of the coiled type. The Mescalero Apache, however, since they have discovered that there is a ready sale for their basketry, make a variety of forms other than the one just mentioned, many of them being of a degenerate type based on ideas borrowed from the whites. In color these baskets are generally yellowish, with geometric patterns in white. They can not be regarded as high types of basketry.

Quite different from the baskets just mentioned are those made by the White Mountain and San Carlos Apaches in Arizona. The commonest pattern here is a large coiled bowl-shaped tray. The ground color of the basket is light, from the color of the willow, while the decoration is in black and usually geometric in design. In addition to this form of basket these Apache make large jar-shaped vessels, in the same weave. These forms generally bear conventionalized human beings, as well as animals; the symbolism differs considerably from that of the bowl-shaped baskets. These Apache also make very graceful carrying baskets, well woven and usually ornamented with tin pendants suspended from short buckskin thongs. As a rule all the types of basketry from the Arizona Apache are well made and are highly prized by collectors.

Similar in shape to the basket bowls of the Apache are those of the Pimas, which they closely resemble, both in shape, size and design. These also are of the coiled type, the foundation being a yucca stem, while the sewing is done with willow or pine splints. The decoration is in black and of geometric designs;



A Pima Basket Maker.

in fact so similar are the Pima basket bowls to those of the Apache that, as a rule, they may be distinguished only by the character of the border, it being braided among the Pimas.

The little band of Chemehuevi on the Colorado River, below The Needles, also make a variety of basket bowl similar to the one just described, but finer in construction and more artistically designed. These, however, are made only in limited numbers, and are highly prized by collectors.

There are many other forms of baskets, made by tribes in the Southwest, not here mentioned. These, however, are made only in limited quantities, or have no decorative value, and may more properly be considered with their makers. Such are the so-called marriage baskets of the Navaho and the curious burden baskets of the Papago. In addition to the more common forms above noted, basketry is used in the construction of cradles, as among the Hopi, and for many other purposes.

California has long been known as the home of the basketmakers, and indeed the art reached a height in this wonderful State such as has been reached in no other part of the world. There are made within the limits of the State and within the region of southern California, baskets of practically every known variety of weave, and of nearly every conceivable form and use.

The first group of peoples to be considered are those speaking dialects of the Shoshonean stock and living in the country east of Bakersfield and Tulare Lake. These tribes are intruders in this part of California, having pushed their way through the passes of the mountains in comparatively recent times. They brought with them the forms of baskets common to-day among the majority of Paiute peoples of Nevada. These include the large carrying baskets used in the gathering of nuts, seeds, etc., many forms of sifters and winnowers, and well made bowls used in the manufacture of corn mush.

In addition to these forms the Shoshoni have borrowed from the California tribes proper, with whom they have come in contact, certain types, such as the well-known bowl-shaped form of basket, characteristic of the region around Tulare Lake. This form of basket is of the so-called coiled weave, the warp being a grass foundation of many strands. There is reason to believe that this beautiful form of basket originated among the Mariposans, the people living just north of the Shoshoni.

They have also borrowed from neighboring tribes, several forms of the finer weaves of baskets, the use of which, however, is largely ceremonial.

Much more highly prized than the baskets of the Shoshonean tribes just named, are those of the Mariposan and Moque-



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A Pima Basket Maker.

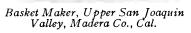
lumnian stocks, found in Tulare County, although scattered among the counties of Kings, Kern, Fresno and Madera, and the region still to the north, comprised within the counties lying north of Madera, and extending, roughly speaking, to the American River. In many respects the basketry of these two peoples has much in common. Such are the flat, plaque-shaped meal sifters, the flat plaques used in the game of dice, and the open receptacles used for general household purposes.

The open-ware receptacles of the lattice type of weaving among the Moquelumnians are generally made of chaparral, while the material used by the Mariposans is sumac. The best known baskets of the Mariposans (aside from the dice plaques

which are so highly prized by collectors) are the bottleneck shaped vessels and the broad-mouthed bowls.

The range of basketry among the Moquelumnians is perhaps wider than it is among the Mariposans. We find several forms of vessels used for cooking

purposes, all well made and of the coil type, with a hard wild-cherry warp. They also produce many coarse-twined burden bearers used for harvesting nuts, etc. In addition to these general utility vessels and the meal sifters, the Moquelumnians manufacture certain forms of ceremonial baskets of great beauty, which are highly



prized. Such are the so-called christening vessels used in christening ceremonies with children. These are wide-mouthed vessels with rather straight sides. All these ceremonial vessels are also of the coil type of weave, the warp being of the wild cherry.

The basketry produced by the peoples of the Moquelumnian stock as compared with those of the Mariposans may be characterized in general terms as larger, coarser and stronger. The Moquelumnian basketry is also, as a rule, manufactured with a definite idea of use, whereas among the Mariposans large numbers of baskets are made for sale to traders.

In decoration there is a general similarity in the two groups of people, geometric designs of highly conventionalized symbols prevailing. It is to be noted, however, that among the Mariposans there is a strong tendency to introduce somewhat realistic representation of animals. The decoration in both groups is usually produced by the introduction on the white ground of a red weft, which among the Moquelumnian people is chaparral, among the Mariposans red-bud. The latter tribe also often introduces a third element in the pattern of another black weft of brake root.

Finally, a word concerning the relative values of the baskets of these three groups of people may not be uninteresting. Those of the Shoshonean group are of least commercial value. Among the Moquelumnian people the most expensive baskets are those of the ceremonial type, as much as fifty dollars having been paid for a single specimen. Much more valuable than the baskets of either of these two groups are those made by the Mariposans, as much as two hundred dollars having been paid for a gambling tray, while a similar amount is frequently demanded for the beautifully made large bowls.

Pottery

As a rule the art of pottery does not flourish among nomadic tribes, while a fixed residence, such as that of the pueblo people, is conducive to a high degree of perfection in this art. The manufacture of pottery is practically confined to the pueblo people, with the exception of a few tribes along the Colorado River in Arizona.

Earthenware vessels not only form the most common objects to be seen in the houses of the pueblo people of to-day, but go where you will, either among the ruins of the cliff dwellers or over the low-lying mounds marking the ruins of former peoples on the mesas or in the valleys, you will find fragments of earthenware by countless thousands.

In manufacture a uniform method scems to have been practiced in the entire pueblo area. Whatever the shape of the vessel it was built by coiling upon itself a long thin strip of clay which had been fashioned between the palms of the two hands. To support the coil in its early stage a basket was used, held in the lap of the maker. After the desired height and shape had been reached by contracting or expanding the diameter of the coil, it was either baked unpainted or the markings of the coil within the vessel were eliminated by means of a fragment of gourd and by smooth water-worn pebbles. All varieties are



Firing Pottery, Acoma.

found in common use to-day; for though the marks of the coil are generally effaced within, the outside often is left as it was on the completion of the vessel.

The general tendency in later times seems to have been to use a larger coil; for nowhere among the pueblo people of to-day do we see vessels so beautiful as those found in the ancient ruins. In some of these vessels the coil is almost as fine as a thread on the outside, the inner markings having been effaced and the surface highly polished and coated with a black lustrous substance. Nor, as a rule, is it possible to find such beautiful specimens showing coil marks as may be found in the cliff ruins of northern New Mexico and Arizona. These vessels often

reached a height of two feet, the effect of a geometric ornamentation being added to by the pinching of the coil at certain intervals with the tip of the finger or some blunt instrument. Should the vessel be designed as a food bowl or for some purpose less menial than that of a cooking pot, the markings were not only effaced within and without, but the vessel was treated first with a wash on both sides, over which was laid the design in colors by means of the macerated end of a yucca fiber, the pigments being mineral earths ground in stone mortars.

Of the decoration itself, endless variation exists. In the more ancient pottery, such as is found in the cliff ruins of the entire region, it generally partook of a geometric nature, laid on in black lines over a white surface. This seems to have been the earliest and most widely distributed variety. Later, additional colors were applied and the decoration, instead of being geometric, partakes of the nature of certain well-known symbols or of realistic bird or animal forms.

Probably the most interesting pottery to be found in the Southwest are the ancient bowls of the so-called yellow ware discovered in such great quantities among the ruins lying along the Little Colorado River and in the ruins of Tusayan proper. These vessels were presumably food bowls, and upon a yellow ground we find many symbols representing a wide range of

forms, not the least interesting of which are those representing masked personages and cosmic symbols. Also in these ancient ruins are found many beautiful varieties of the so-called red ware, the decorations being, as a rule, black and white. Among certain Rio Grande pueblos we find that all attempt at decoration has disappeared, the vessel being painted a lustrous black, both within and without.

The forms vary according to the purpose for which the vessel was designed. Thus the round-bottomed, wide-mouthed cooking pots and the shallow food vessels have already been noticed; other forms were canteen shaped, and were used for carrying water. Others may be regarded as pitchers or mugs, while vessels fashioned after the form of dippers with long handles are common over a wide area, especially in the ancient ruins. In certain of the New Mexican pueblos the tendency has been in recent times toward realistic representations, in the form of animals or in that of human beings. Similar forms are also found, but less commonly, in the ancient graves.

Concerning the method of firing, both in ancient and modern times, there seems to have been a pretty general degree of uniformity. Wood has been extensively used, but does not produce the best results. Recently sheep manure is largely used. It seems probable also that in ancient times some peoples of the Southwest were acquainted with the burning property of cannel coal, and it is possible that this was availed of in certain regions.

Comparing the pottery found in the ancient graves with that made by the present pueblo people, it is seen that there has been a slow deterioration of the art. The present people

do not understand the art of manufacturing such delicate pottery, or of firing as it was practiced in former times.

As has been noted, outside of the pueblo area but little pottery is manufactured. It seems probable that formerly the Navajo, and even the Apache, were potters to some



right, 1900, by E. S. Curus. Nampeyo, of Hano, Decorating Pottery.



A Hopi Pottery Maker.

extent, and even to-day, rude tall vessels with round

bottoms are manufactured by the former.
There is no attempt at decoration in these vessels except that occasionally an additional band is

placed around the mouth of the vessel, which may have slight indentations for ornamentation. The Yumas, as will be noticed at greater length later on, make pottery in considerable quantities. They generally limit their forms to wide-mouthed, bowl-shaped vessels, which are usually painted red, with a slight geometric ornamentation in black.

Weaving

The art of weaving in the Southwest was probably contemporaneous with that of the manufacture of basketry and of pottery. For, as in the prehistoric graves, we find countless numbers of earthenware vessels, and now and then a trace of the more perishable basketry; so, also, we find that the ancient inhabitants of this region knew the art of weaving. Many of the pueblo people have for ages cultivated cotton and used it in large quantities in the manufacture of clothing. To-day the art of weaving is practically confined to three peoples, the Zuñi, the Hopi and the Navaho. Many native-made garments are still worn by the pueblo people along the Rio Grande, especially in their ceremonies, but the majority of this clothing has been and is to-day purchased by them from the Zuñi, or the Hopi.

With the introduction of sheep in early times by the Spaniards a new textile was added which gave additional impulse to weaving, which, among the Navaho at least, has resulted in an industry second to no aboriginal industry in North America. Inasmuch as the art is practiced much more extensively by the

Hopi than by the Zuñi, we may confine our attention first to the Hopi, and then speak of weaving among the Navaho. Curiously, and contrary to the usual custom among the primitive peoples, all of the weaving among the Hopi is done by the men, who also do all the carding, spinning and dyeing of the wool. Formerly the Hopi used exclusively vegetable dyes, which, at the present time, are being replaced by the cheaper and less durable dyes obtained from the trader.

The looms used by the Hopi are of two kinds, a small heddle loom being used in the manufacture of belts, hair strings and garters, which form an intrinsic part of the Hopi costume. The other is the typical loom used by primitive peoples in many parts of the world. In spite of its apparent simplicity and rudeness, the Hopi produce on it all the blankets and dresses worn by the women, and the kilts and sashes and other objects of ceremonial attire worn by the men. In these they employ both wool and cotton and produce types of weaving which are superior to anything ever produced by the much vaunted Navajo.

It is an interesting fact that the Hopi men no longer produce a blanket for themselves, inasmuch as it is cheaper for them to exchange women's dresses or other products of their own looms with the Navaho for the cheaper grade of blankets, which admirably serve their purposes. A complete collection of the textiles worn by the Hopi comprises no less than twelve different varieties of garments. They are also able to manufacture from well-spun cotton string, both knitted leggings and a peculiar shaped cap, both to-day being confined to ceremonial use.

Weaving among the Navaho has received great attention;

they not only manufacture numerous kinds of blankets which may be found in practically every part of the civilized world, but in former times they produced from a cloth introduced by the Spanish traders and known as bayeta, splendid specimens of weaving, which to-day are almost priceless possessions.



A Hopi Belt Weaver.



Hopi Man Weaving Woman's Ceremonial Robe.

All the weaving of the Navajo to-day is done by the women, who use a large hand loom not unlike that in use among the Hopi. The ancient vegetable dyes have been replaced by cheap dyes which they secure from the traders. The Navajo are able to obtain three natural colors from their flocks-white, gray and black At the present time they consume large quantities of Germantown yarn which they secure from the traders It is an undoubted fact that the art of weaving is rapidly

deteriorating among them, but it is possible that when the true value of a well made blanket becomes better understood by the public, and when the demand for the cheaper blankets is lessened, the women will put forth renewed effort, and that the former high-grade product may be restored. It must be admitted, however, that even in the times of long ago, when the Navajo used for their wool bayeta, and when the art among them was at its height, they never made blankets which excelled those made every day by the Hopi of the present generation.

It remains finally to add a word concerning the patterns found on Navaho blankets. The expression, "a typical Navaho pattern," is occasionally heard. The absurdity of such an expression becomes apparent when we remember that the art of weaving among the Navaho is of comparatively recent origin, and that the patterns of the old blankets were of simple geometric designs. We may not say, therefore, that one pattern is more "typical" than another, each being the momentary fancy of the maker.





Upper Rio Grande Pueblos

Tesuque — Nambé — Pojoaque — San Ildefonso — Santa Clara — San Juan — Picuris — Taos

HE pueblos lying within a radius of thirty or forty miles of Santa Fé are not the most interesting. All have been more or less influenced by the Spaniards and each in early times was dedicated to some saint who became its patron. In some cases the name of the saint was prefixed to the old pueblo name, as San Diego de Tesuque. In other

cases the native name has disappeared and the pueblo has no name but that of its saint, as San Juan. But in all the Rio Grande pueblos, the saint is the patron, his or her image is in the village church, and the saint's day is the occasion of the greatest public festival. The ceremonies, therefore, are glossed over with Christianity; at the same time they are strange, dramatic, weird and beautiful, forming spectacular pageants of gorgeous coloring.

The pueblos most easily reached from Santa Fé by road may be considered first. In Santa Fé we shall find ample facilities for such journeys.

Tesuque

This is a Tañoan pueblo on the left bank of the Tesuque River, and numbers about one hundred inhabitants. The Spanish element does not predominate, for it is one of the purest Indian villages in the vicinity. It may be easily reached from Santa Fé by a good road in a drive of one and one-half hours. Conveyance may be secured for the journey at three dollars for two people, or five dollars for four, this price including the services of a driver. There is no hotel at Tesuque, nor is it possible to find accommodation there for the night unless one stops with one of the Indian families.

The journey to this pueblo is a favorite one among tourists who visit Santa Fé, and they generally return with some of the peculiar forms of pottery which have come to be specialties with the people of Tesuque. This pottery comprises little images, or so-called idols, and curious animal forms. Of these they make a great variety, and, as a rule, they may be had very cheap. They also manufacture drums of the tambourine shape, bows and arrows, war-clubs, rattles, etc. Specimens which are manufactured expressly for sale, however, possess very little intrinsic worth, and even less artistic merit.

. Concerning the religious rites of this people practically nothing is known. They are nominally Catholics, and the town boasts of a small dilapidated church.

The town is quadrangular in shape, about two hundred and forty feet long by one hundred and fifty feet broad. The houses are generally terraced and rise to a height of two stories, entrance to the rooms of the second terrace being by a ladder from the street. The women still prepare their meal on the primitive metates, there being in many houses three or four compartment mealing bins, where the corn is ground between two stones. The walls of the rooms, usually small, are tinted with a three foot band of red or yellow clay, the remaining portion being washed with gypsum. The women, as a rule, wear native-made garments. The men dress after the fashion of the whites.

Nambé

This pueblo is also reached only from Santa Fé. The journey of fifteen miles may be easily made in one day, returning the same evening, the drive consuming about two hours' time. The



Pueblo of Tesuque.

cost of the journey is from four to five dollars, according to the size of the party. Nambé, like Tesuque, has no provision for accommodation over night. It would be possible, however, to remain over night, should one desire, with one of the Mexican families. This little



Estufa at Nambé.

pueblo of about seventy-five inhabitants will probably disappear within twenty-five years, as the Indians are gradually leaving it or are intermarrying with the Mexicans. There is but little of interest in Nambé, apart from the village itself, to attract the attention of the tourist. A fair grade of pottery is manufactured in small quantities. They also make a poor imitation of the famous black ware of Santa Clara pueblo.

The town is rectangular in shape, built around the four sides of a large plaza. Near by may be seen the large circular external wall of the estufa or kiva, where the men congregate and where the secret rites of all religious ceremonies are held. Judging from the large size of the Catholic church, now dilapidated, and from the many crumbling houses, Nambé was once much more populous than now. Wheat and corn are the chief farm products.

Pojoaque

This village is only mentioned here in order that the list of pueblos near Santa Fé may be complete. In the census of 1890 it boasted a population of only twenty Indians, and to-day there are very few of these left, their place having been taken by Mexicans and the original inhabitants having left for other pueblos. The village itself, at the junction of the Pojoaque and Tesuque rivers, is only three miles from Nambé, to the north, and naturally is best reached from the latter village. Indeed, Tesuque, Nambé and Pojoaque could all three be visited in one day, provided an early start were made in the morning and the return late at night.



Santa Clara Woman.

San Ildefonso

This pueblo, slightly mixed with Mexicans, boasts a population of about one hundred and fifty people of the Tañoan stock. The village lies on the east bank of the Rio Grande, at its intersection with the Pojoaque River, and five miles below the pueblo of Santa Clara. It is most easily accessible from Santa Fé by means of a narrow-gauge railway line running north from Santa Fé, which one would leave at the San Ildefonso station, one and a half miles from the pueblo. It is not possible to secure a conveyance from the station, and the journey would be made on foot. The pueblo may also be easily reached from the important town of Española, on this same railroad, from which it is distant about seven miles. Here one may readily secure a con-

veyance. At the pueblo itself one may stay over night at the house of Mrs. Durand or with Señor Gomez, a Mexican.

In the center of this quaint and beautiful old town is an unusually large plaza, well kept and possessing the unique distinction among pueblos of having ancient cottonwood shade trees. The houses are of adobe, generally two stories in height, and in the form of terraces which face streets running parallel to the plaza. Toward the western end of the plaza stands an old church with a ruined convent. Here, so it is said by Lummis, the first pioneers of Christianity were poisoned by their savage flock; and here in the red Pueblo Rebellion of 1680, three years later, priests were roasted in the burning church.

Many ancient and interesting ceremonies are still performed. The most important ones are given on certain feast days, those of January 23d and September 6th being the best known.

A certain amount of cheap grade fancy pottery is made at San Ildefonso, red-and-black and brown-and-black predominating.



Old Spanish Mission, Poioaque.

Santa Clara

This is one of the three most interesting pueblos in the vicinity of Santa Fé, and is beautifully situated on the river



General View of Santa Clara Pueblo.

terrace on the west bank of the Rio Grande, five miles above San Ildefonso. It is the fifth in size of the twelve Tañoan pueblos. numbering in population about two hundred and twenty-five. The town has preserved much of its aboriginal picturesqueness. and shows no very great trace of Spanish influence. The people are kind and hospitable. A railroad passes through Santa Clara, but there is no station, and it is necessary to go on to Española, where one returns on foot or in conveyance. the distance being only two miles. Santa Clara may also be reached by conveyance from Santa Fé, from which it is distant twenty-four miles. A very pleasant two days' excursion might be made from Santa Fé, which would include the pueblos of Tesuque, Nambé, Pojoaque and Santa Clara, the cost of the journey not exceeding five dollars per day including the services of a driver and his expenses. Should additional days be added to the journey a reduction would be made.

Not the least interesting feature of this pueblo is its kivas or underground chambers where the sacred rites and ceremonies are held. One of the kivas is above ground and square, an exception to the general rule among the New Mexican pueblos. The most important religious ceremony is held on August 12th.

Of the several kinds of pottery manufactured in this pueblo the polished or glossy black ware is probably the best known. Inasmuch as this black, lustrous ware is one of the most common in the Southwest it may not be out of place to quote here what Stevenson* says concerning its method of manufacture: "The clays used by the Santa Clara Indians are of a brick-red color, containing an admixture of very fine sand, which, no doubt, prevents cracking and burning, and hence dispenses with the necessity of using lava or pottery fragments, as is the custom of the Indians of the western pueblos. The burning is carried on until a sufficient degree of heat is obtained, properly to bake the vessels, which still retain their original red-brick color. At this juncture such of the vessels as they desire to have remain in that condition are removed from the fire and allowed to cool, when they are ready for use. Those which the artists intend to color black are allowed to remain and another application of fuel, finely pulverized, is made, completely covering and smothering the fire. This produces a dense, dark smoke, a portion of which is absorbed by the baking vessels and gives them the desired black color."

San Juan

San Juan is one of the largest of the Tañoan pueblos, numbering over four hundred. It rivals Santa Clara in general interest to the tourist. The pueblo is situated on the summit of the high sand dunes on the left or east bank of the Rio Grande River, six miles from Española, from which one may easily drive in an hour, or the railway train could be left at Chamita station, from which conveyance can be secured to the pueblo,

a distance of only one mile.

The adobe houses, usually clean and well furnished, rise frequently, in the form of terraces, to a height of two stories, and face streets running at right angles or parallel to a long and irregular plaza. Ladders

^{*}Bureau of Ethnology, Vol. II, p. 331.





extend from the streets to the roofs of the first terrace. In the plaza is a wellbuilt stone chapel, while beyond the western end stands a large Catholic church with an immense gilded statue of the Virgin in front of it.

Probably the most interesting individual in San Juan is Mr. Sam Eldodt, who has a large collection of antiquities, and who furnishes accommodation to travelers for a consideration.

Owing to the fact that this pueblo was situated on one of the early military wagon roads it has been frequently visited and consequently it has been carefully searched for relics. The manufacture of pottery is not extensively carried on, although the black, lustrous ware and some animal forms are made. The



San Juan Girl.

women of San Juan make a number of articles of buckskin, which they decorate with beadwork. It requires no great effort on the part of the visitor to learn that the natives are inclined to be aristocratic in their manners; and in this they have some show of reason, for they are somewhat better off than the people of the neighboring pueblos. The gardens, orchards and tiny farms belonging to this village are most beautifully kept and show evidences of thrift which has been said to be suggestive of that so prevalent in Holland. On June 24th, St. John's Day, occur interesting performances of ceremonial dances, native games and foot races.

Picuris

This little Tañoan pueblo of about a hundred inhabitants is situated at the foot of the Picuris Mountains, and is devoid of great interest. It may be easily reached from the railway station of Embudo from which it is situated about fifteen miles. The road is somewhat rough and the journey requires about four hours. There is no hotel in Embudo, but one can secure accommodation for the night as well as on the journey to Picuris, from one of the Mexican families. There



A Picuris Indian.

are a number of interesting ruins in the vicinity of Picuris. As this pueblo is somewhat difficult of access, its inhabitants retain much of their primitive character, do not possess many objects of white manufacture, spend much of their time hunting deer in the winter, and still retain certain very interesting religious performances, the most important ceremony being on August 10th. A visit should be paid to the circular kiva, a temple for native ceremonies.

Taos

From many points of view this Tañoan village of more than four hundred inhabitants is the most interesting of all the upper Rio Grande pueblos. The inhabitants of Taos manufacture little or nothing for sale, and the tourist therefore may not hope to carry away many souvenirs.

Taos is most conveniently reached from the railway station of Tres Piedras. In visiting Taos from Santa Fé one arrives at Tres

Piedras at about four o'clock in the afternoon. Taking a conveyance from one of the two livery stables one could make one-half of the thirty-two miles journey to Taos that same afternoon, the halting point being the Rio Grande River, which at this point is a canyon with high walls, and hot springs of interest. The river is crossed here by a bridge, toll one dollar. Leaving this point early in the morning of the following day, Taos could be reached at ten o'clock in the morning. The Mexican village of Fernandez de Taos possesses two hotels.

The pueblo of Taos is situated between the rivers Taos and Lucero, which send down a never-failing supply of water, and is in easy distance of the Taos Mountains, which tower above it to a height of thirteen thousand feet. The village is divided into two sections on opposite sides of the river Taos, one section rising to a height of seven stories, the other five. In this lies the chief glory of the pueblo; for this height is not exceeded by that of any of the other pueblos of the Southwest, Zuñi,

its nearest rival, rising in its highest part only five stories. These two great piles of communal dwellings have been likened by Mr. Lummis to pyramids, and indeed their resemblance to pyramids is very great, inasmuch as they recede step by step from the first floor to the summit. Taos is surrounded by a wall, which to-day averages about four feet in height, but in former times was probably higher. The loopholes in the wall from which they shot at the enemy while defending their city may still be seen. The inhabitants of the village are extremely conservative and retain many of their old religious ceremonies, which are conducted in underground chambers or estufas, thus described by Miller:

"At Taos there are seven kivas, four on the south side of the creek, and three on the north side. The side walls of several of them can be seen for about a foot from the top. It may be that they were once entirely subterraneous and that the earth has worn away from them, though, from the height of the roofs and from the general level of the ground around, I am led to think the earth had been banked up around them to give them the appearance of being wholly underground. This holds true more particularly of the kivas within the town wall.

"They are circular structures, built almost wholly underground, and entered by a single opening in the roof. There is no other opening in the room, save a small hole at one side to secure a draft for the fire. These kivas have come to be used as places for holding the civil, religious and secret ceremonies of the tribe, but they were originally the sleeping and lounging places of the men, and could not be entered by the women except to carry food to their husbands, sons and brothers.

"One descends by a ladder, the two poles of which extend high up into the air. The room is just high enough for one to stand erect, and the ceiling is covered with soot from the fire which is lighted in the fire-pit in the center of the room on the

occasion of any ceremony. One or two untanned ox hides lie on the floor, and a big drum, the skin of which is buffalo hide."



Old Spanish Church, Picuris.

Of the houses, Poore gives the following interesting account:

"There were originally no doors or means of ingress on the ground floor of the two great structures, but instead entrance was had through trapdoors in the roof reached by ladders from without, which in time of danger might be pulled up and so allow no opportunity to the invader. In front of both pyramidal structures stands a row of huge bake ovens, conical in shape, each provided with a large door and hole for draught, which are seldom used save by the dogs, which find them snug kennels at night. After a fire has been made and allowed to burn for some time the oven is cleared, heat sufficient remaining for a number of bakings.

"I give a close description of an Indian dwelling, as, with the exception of the height to which the structures rise at Taos, one is typical of all others throughout the pueblos. Mounting one of the many ladders, we gain the first platform. The door confronting us is about two-thirds the height of a man. probably measures fifteen by twenty feet, with a height of seven and a half feet. In the corner is the open fireplace, about which lie pots, large and small, used in cooking, also a pile of piñon branches and mesquit roots for fuel, and a large olla with open mouth, serving as a deposit for ashes. Along one side is the bed, with its cushions of skins and blankets, under which are concealed the few valuables of the occupant. rafters hangs the cradle, a stout wicker basket furnished with soft skins, and near it are strung festoons of manycolored ears of corn, red peppers, jerked meat, bear grass,



One of Two House Pyramids, Taos.



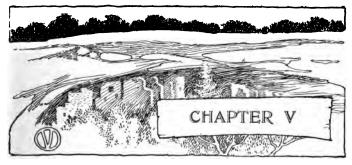
San Juan Dance.

feathers, etc. The floor is of hard cement, sometimes blackened and polished by application of beef blood. At the height of two feet is a broad band of yellow ocher encircling the room; from this to the top the walls are sometimes whitened with washes of ground gypsum. The ponderous cottonwood timbers overlying the walls are barked and left clean, and suffered to protrude several feet, more or less, on the outside. A multiplicity of ladders of all sizes, charred and cracked pots capping the chimneys, a bake oven large enough for a night's lodging, trapdoors, poles of odd and unnecessary lengths, which serve as occasion requires for jerking meat and drying clothes, are what confront one on each exit from the dim interiors into the intense sunlight. Mounting higher, the walls are found to be more delicate and the ceilings lower."

The great religious festival of Taos is held annually on September 30th. It is one of the best known in New Mexico, and is largely attended by white visitors from Colorado and the larger cities of the Rio Grande valley; added to these are thousands of Mexicans, Jicarilla Apaches and Pueblo Indians—an interesting and motley throng. As part of the festival, there is usually a spirited foot race between the Indians of the north and south pyramids, the losing party paying the dues of the pueblo to the priest for the ensuing year.

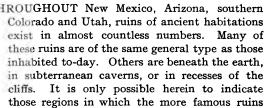






Homes of the Ancients

Pajarito Park — Upper San Juan — Mesa Verde — Chaco Canyon — Canyon de Chelly — Age of the Cliff Ruins



are located, and tell how they may be visited. Attention may then be briefly directed to the question of the contents, age and occupancy of the ruins themselves.

For several of the more important groups of ruins of the Southwest, Santa Fé forms a convenient starting-point. In the region lying north of Santa Fé and within the pueblo area are many ruins on small tablelands or in the valleys, but devoid of the picturesque interest possessed by the cliff ruins.

Pajarito Park

The first great group of cliff ruins is found in the region known as Pajarito Park, filled with splendid, beautiful ruins, which it is hoped may be preserved from the despoiling hands of vandals. Pajarito Park, extending north from El Rito de los Frijoles to Santa Clara creek and west of the Rio Grande, may be reached by carriage from Santa Fé, the cost of a conveyance for a party averaging three or four being about five dollars per day. About four or five days should be devoted to the journey; or, should it seem

desirable to shorten the carriage ride, the train may be taken from Santa Fé to Española, where it is possible to secure conveyance, and from which point the more interesting ruins may be reached within a day's ride. Here it is possible to see not only typical examples of the cavate lodges and beautifully preserved pueblo ruins in the valleys, but splendid specimens of cliff ruins, possessing all the features which go to make up a cliff city.

Those pressed for time will be more than repaid to spend a few hours on a visit to two single groups of ruins, which may easily be reached by a drive of two hours from Española. The way soon after leaving Española ascends the rugged mesa by means of a well-made road. The summit of the mesa gained, there is afforded a sublime view of the Rio Grande valley and its many mountain ranges to the east, while in front, to the west, extends a beautiful level plain, terminating in lofty, wooded mountains. After a six mile drive across the plain we halt at the foot of a towering perpendicular wall nearly a mile in length, its face being literally honey-combed with hundreds of chambers. This is one of the best series of cavate ruins to be found in the Southwest, and its accessibility and natural beauty should cause it to be one of the best known. On the summit of the plateau is a beautiful and well preserved pueblo ruin of unusual interest.

Within a short distance from Santa Fé and easily reached by means of a carriage road is the little canyon called El Rito de los Frijoles, the stream itself emptying into the Rio Grande River about twenty-five miles above the pueblo of Cochiti. This little "brook of the beans," the southern boundary



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Entrance to Cavate Dwellings, Pajarito Park.

of Pajarito Park, has true canyonlike banks, with large, pointed trees occupying the valley and the summits of the canyon. Here we may find hundreds of cave rooms and houses, the walls of which still retain many interesting evidences of former occupation, while in other parts of the canyon are many well preserved true cliff ruins. Here and there along the walls are also to be found large numbers of pictographs cut in the living rock.

Passing over many small groups of ruins within the imme-



Rock Carvings and Entrance to Cavate Dwellings, Pajarito Park.

diate vicinity of Santa Fé, we may next consider that great group of cliff ruins, the most famous in the Southwest, which occupy the southwestern corner of Colorado, the northwestern corner of New Mexico, and the northern corner of Arizona. Without considering in detail any one ruin or the ruins of any single canyon of this great area, over two hundred miles square, we may confine our attention to four regions, any one of which is easily accessible and well worthy of a visit.

Upper San Juan Canyon

To reach this most interesting cliff region we have a choice of two routes, viz., by train and stage from southern Colorado, or by train and stage from central New Mexico. For the first, the train is taken at Santa Fé northward to the town of Conejos. Here the train is taken for Durango near the southern and western boundary of Colorado. South and west of this town extend a large number of well-known canyons and mesas, each with its ruins of special interest. These canyons are all tributaries to the San Juan River, which flows westward from here, on to the Colorado.

Of these canyons those of Animas La Plata and the Chaco are the most famous, easily reached by means of a stage which leaves Durango, the road following the course of the Animas River to Aztec, forty-two miles south of Durango. From Aztec

another stage line extends northwest to La Plata, from which point the ruins in the La Plata canyon may be visited. Another stage line from Aztec follows on down the Animas River, and westward along the San Juan, to Jewett, about thirty-five miles to the west. From Jewett, the Chaco region may easily be reached. Probably the majority of those who wish to visit any of these regions will prefer to take the stage direct to Farmington, eighteen miles below Aztec at the junction of the Animas and San Juan rivers.

Canyons of the Mesa Verde

More interesting and better known are the canyons of the Mancos, McElmo and Ruin, crossing the so-called Mesa Verde. For a visit to this region the railroad journey is continued westward from Durango forty miles, to the station of Mancos. On arriving at Mancos the majority of tourists will prefer to go direct to the ranch of Messrs. Wetherill, who meet parties at the train, if previously arranged for by correspondence. Alamo Ranch, the home of the Wetherills, is located in beautiful grounds two miles from Mancos, and is in itself well worthy of a visit. It is possible to make arrangements with the Wetherills, not only for board and lodging, which they are able to furnish at the reasonable rate of two dollars per day, but for every necessity for a short or extended journey to the more famous cliff ruins. They make a charge of but five dollars per day for each individual, and furnish horses, guides, necessary



Cliff Palace, Mesa Verde, Colo.

blankets, camping outfit and commissary supplies. As a rule, three days will suffice for the return trip from the ranch, during which time the most famous ruins of the Southwest, such as Cliff Palace, Spruce Tree House, Balcony House, etc., may easily be visited. Owing to the



House with Balcony, Mesa Verde, Colo.

long familiarity of the Wetherills with this entire region tourists may feel perfectly safe under their guidance and sure of good camping-places with sufficient water, and at all times free from danger and great discomforts.

In connection with the canyons of the Mesa Verde the manner employed by the natural agencies in the formation of these canyons may be briefly stated. Mesa Verde itself is described as an irregular tableland, seven hundred feet high, with an area of several hundred square miles, and is formed of horizontal strata, which consist above of sandstones which lower down alternate with shales, the lower strata being successively of shales and clay. When a canyon has been formed by the action of water, cutting through the various strata, the erosion goes on at a very rapid pace when once the soft clay has been reached. Naturally, as the canyon broadens at its base, the upper layers are undermined and fall into the valley, exposing vertical cliffs. Thus strata of varying degrees of hardness are exposed, and as a consequence there are formed many steep slopes or recesses extending back into the walls of the canyon, and it is in these slopes or steps that the great ruins are found.

Chaco Canyon

The second method of reaching these great canyons tributary to the San Juan is from the town of Gallup, New Mexico. For this the journey is continued from the city of Santa Fé westward on the main line of the Santa Fe to Gallup, where one finds good hotels, and ample conveniences for the journey

north. From this point it is possible to reach the Chaco Canyon in three or four days; the trip may be continued to the north for the other canyons. Lying west of the Mesa Verde and the canyons just enumerated is the Canyon de Chelly, the head of which lies in the eastern part of Arizona, and which may be reached by conveyance from Gallup by the way of Fort Defiance probably more easily than by any other method.

For the direct journey to the Chaco Canyon the shorter route from Thoreau is recommended. At Thoreau, about thirty miles east of Gallup, is the trading-post of the Horabin Brothers, who can furnish conveyance for the canyon. It would be still better to have written to Mr. Richard Wetherill (postoffice Putnam, New Mexico), a trader in the Chaco Canyon, who is able to meet tourists at the station on the arrival of the train, when the journey of sixty-five miles into the canvon will be begun at once. Arrangements may be made with Mr. Wetherill not only for conveyance into the Chaco, but for an extended visit, including all supplies, guide, etc., covering all the points of interest of this wonderful region. Everything considered, this will probably be found the most interesting and convenient excursion into the great cliff and plain ruin region of the South-It is also practically the only region where an extensive territory may be explored without the necessity of saddle horses.

Chaco Canyon possesses certain features of interest not possessed by the canyons which seam the Mesa Verde. We find in addition to the cliff ruins large villages, many of them of great size, occupying open bottom lands, there being no less than nine such villages or pueblo ruins, and many small ones. The most famous of the large village ruins of this canyon is that known as Pueblo Bonito.

Pueblo Bonito, famous and beautiful, is one of the largest in the Southwest. The rooms, about five hundred in number, were probably in terraces and were arranged in the form of a great semicircle. The outer wall around the pueblo was massive and imposing. The ruins measure nearly five hundred and fifty feet in length and over three hundred feet in width. Within the open space enclosed, which measures about two hundred by three hundred feet, were two courts, formed by a series of low rooms extending across the space by the short axis; in the courts have been located several circular underground temples or kivas,



House Walls Exposed by Recent Excavations, Pueblo Bonito, Chaco Canyon.

in one of which Mr. Pepper found a ceremonial deposit of turquoise of very great value. Great quantities of other and equally interesting material have been found in the explorations, which, it is expected, will throw light on the ancients of this beautiful valley.

Canyon de Chelly

The tourist who loves to see new scenes—sights which have not yet been made commonplace—is strongly advised to outfit at Gallup, traverse the desert for three or four days and pitch his tent in the superb Canyon de Chelly, true home of the cliff ruins in all their glory, but on account of its difficult access practically unknown. The canyon is about twenty miles long, with two tributary canyons, Del Muerto and Monument. Access to the bottom of the canyon, the walls of which are narrow, lofty and precipitous, may be had by wagon only at the mouth, although there are a couple of rather difficult horse trails toward the center of the canyon. Indeed, for the traveler on horse there is but little difficulty of approaching the canyon from any direction. Thus it may be reached on horseback from Ft. Defiance, or from Keam's Canyon in Tusayan by a day's ride.



Typical Pueblo Ruin in Chaco Canyon.

Within the canyon over one hundred and sixty ruins have been located, varying in size from a single room to great villages numbering almost a hundred rooms. The character of the sites is equally diversified, for while some occupy open and defenseless positions in the plains, others are found occupying lofty ledges or recesses in the face of the canyon walls, approach to which is almost impossible. The character, age and in fact the entire problem of ancient canyon ruins, as illustrated in de Chelly, is most thoroughly discussed by Mindeleff, and those who wish to study this interesting subject can not do better than examine this grand canyon with Mindeleff's paper as their guide.

The Canyon de Chelly possesses additional interest inasmuch as in the valleys are thousands of peach trees, dating from early Spanish times, and which have long belonged to the Navaho, who formerly resorted to this canyon in large numbers for purposes of agriculture.

Age of the Cliff Ruins

It was formerly the custom to designate all ruins of this entire region as Aztec and to ascribe to them an Aztec origin. In connection with this opinion it was currently believed that these ruins were of an immense antiquity. Both opinions are now believed to be largely erroneous. The builders of these ancient cities were in all probability tribes which build to-day similar

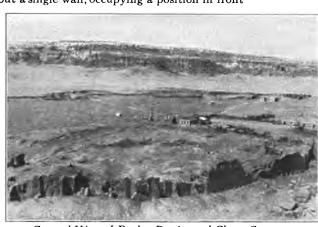
habitations in both New Mexico and Arizona, i. e., the present pueblo peoples, and we must look upon their ancestors as the original occupants.

The Cochiti, who occupy a pueblo a few miles south of Santa Fé on the Rio Grande, have a well-defined tradition that their ancestors formerly occupied cities now in ruins in Freioles canvon. This fact has been made use of by Bandelier in his valuable but too little read novel, "The Delight Makers." The Hopi also have well defined traditions regarding a time when certain clans occupied certain pueblos or cliff dwellings in the Canvon de Chelly, while similar traditions exist in Zuñi and many other pueblos, and even among the Navaho. Nor does it seem possible to assign any great antiquity to ruins even of cliff dwellings in the canyons of the Mesa Verde; for we have credible evidence that certain ruins were occupied certainly within a period of four hundred years, while the oldest ruin of the entire region perhaps does not antedate a period of one or two thousand vears, although it must be admitted in regard to certain ruins that there is no evidence that they were not occupied several thousand years ago.

In regard to the character of the ruins, it may be observed, first, that the cliff ruins occupying, in many instances, almost inaccessible positions in the canyons, owe their sites to the necessity which their occupants had of protection against marauding bands of Shoshonean and Athapascan stocks, such as the Ute, Piute, Apache, etc. It is also possible that the original builders of the cliff houses chose these shelves in the canyons owing to the opportunity which was afforded them of constructing habitations at a slight expense of labor, the nature of the recess itself demanding but a single wall, occupying a position in front

of or facing the canyon to complete the dwelling.

There has also been much speculation concerning the use of the several towers



General View of Pueblo Bonito and Chaco Canyon.



White House, Canyon de Chelly.

which form interesting features of these cliff cities, and it is commonly regarded that they served as watch towers. Owing to Fewkes' researches, however, upon some towers found in the vicinity of ruins in Arizona, it seems that these towers were not built for watch towers, but to aid in the capture of eagles, and it is possible that the towers of the cliff country were built for a similar purpose.

As the people of the canyons gained greater confidence in their ability to ward off their enemies, owing to their increase in population, towns were built along the valleys; but even here they took effective measures for defense. The great city of Bonito, for instance, was so constructed that the terraces of the houses faced toward a great inner plaza, there being exposed on the outside a broad expanse of high wall. For various reasons, the former inhabitants of the cliff ruins migrated toward the south. The chief factor in this movement was probably the difficulty of sustaining life in the canyons and owing to the great convenience afforded by the more open plains.

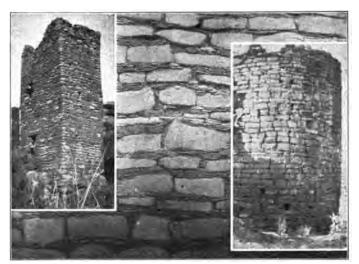
Concerning the habitations which were excavated in the soft volcanic rock, and which occur most frequently in the region now under discussion, it may be observed that the ease with which comfortable chambers could be excavated was probably the underlying motive in their construction; for they are found only in regions where small natural canyons or caves abound

in the volcanic tufa, such as exist in the region in northern New Mexico just west of Española on the Rio Grande, and in Arizona in the region about Flagstaff.

The character of the life of the people of the ancient cliff and valley ruins probably did not differ materially from that of the pueblo people of to-day. They cultivated cotton to a considerable extent; they were expert basketmakers, and excelled especially in the art of pottery. Instead of the buckskin moccasins of to-day, sandals of plaited yucca stems or woven of cotton in many colors, were worn. Many objects of a ceremonial nature have been found which lead to the conclusion that in ancient times ceremonies were performed, presumably not unlike those which may still be observed. It is interesting to note also that among these ancient ruins we often find a kiva or estufa, which forms such an intrinsic feature of pueblo life to-day, where were performed the secret rites of esoteric societies.

Fortunately for the student, owing largely to the dryness and purity of the atmosphere of the Southwest, large numbers of objects have been preserved throughout a period of several generations. Thus we can reconstruct the life of the ancient dwellers of these ruins. From our knowledge of the present pueblos, we are able to interpret practically all of the objects which are found in connection with the so-called mummies or desiccated bodies and buried as mortuary objects. Among the thousands of specimens which have been found are three or four of very great value, the use of which has disappeared from the tribes of the Southwest. This is the so-called atlatl or throwing stick. With these, in former times, a spear or javelin was hurled to a great distance owing to the added impulse, the throwing stick serving as a lever. In addition to the mortuary objects found with the mummies there is often encountered wrapped about the bodies beautiful feather cloth and other garments of cotton, often in good state of preservation. As a rule the dead in these ancient ruins were deposited either in a chamber at the rear of the house, which was walled up, or in the floors of the living chambers. In the latter are often found the metates or mealing stones, earthenware vessels, etc., not unlike those still in use. Even in the arrangement of the rooms we find many similarities to existing types of architecture.

Allusion has already been made to the fact that one of the



Towers and Section of Masonry, Mt. Elmo and Chaco Canyons.



Wall of Canyon de Chelly with Cliff Ruin.

regions of the land of the cliff dwellers is now being preserved from the hands of vandals. It is high time that such action on the part of the National Government were taken; for a thoughtless individual with the aid of a stick of wood can in a few minutes topple over some great beautiful wall of a ruin which has stood for centuries, and which if unmolested would stand perhaps an even greater number of centuries. Greatly to be commended is the effort put forth by a band of energetic ladies of Denver. known as the Cliff Dwellers Association, who have as their object the preservation of the ruins in the canyons of the Mesa Verde. Every one who is interested in the preservation of any of the evidences of man's former habitation on this continent should lend every aid possible toward the extension of this movement in the Southwest, which looks to the setting aside of national parks, the protection of which shall be assumed by the Govern-These splendid ruins form a priceless heritage in which every true citizen of the United States should not only feel a just pride, but in which he should exert all his influence, that they may be transmitted to future generations in all their perfection.





Rio Grande Valley and San Filipe Pueblo



Lower Rio Grande Pueblos

Cochiti — Santo Domingo — San Filipe — Sandia — Santa Ana — Sia — Jemez — Ialeta



N order to visit the first three of the lower Rio Grande pueblos, the most convenient center is Thornton, situated near the mouth of the Galisteo River where it empties into the Rio Grande, and where the main line of the Santa Fe turns abruptly south, following the course of the latter river. At present there is no hotel in Thornton,

but travelers may obtain meals at a Chinese restaurant. Those who prefer to make their headquarters at the Alvarado Hotel in Albuquerque may use the morning train to Thornton, where a team will await their arrival if due notice has been given the Thornton station agent. Ample opportunity is afforded for a visit to Santo Domingo and Cochiti, or Santo Domingo and San Filipe, before the arrival of the return train to Albuquerque in the evening.

It is to be noticed that with the exception of Jemez, Isleta and Hano, we have now left the territory of the Tañoan pueblos and have entered that of the Keresen speaking pueblos.

Annual Ceremony at Cochiti.

Cochiti

This interesting pueblo of about two hundred and fifty inhabitants, recently brought to prominent notice by the researches of Professor Starr of the University of Chicago, is situated about ten from Thornmiles ton, from which it is easily reached

by a daily stage, leaving Thornton at ten in the morning and arriving at Cochiti at a quarter of twelve. Return to Thornton can be made on the same day by the return stage, which leaves Cochiti at a quarter past three, the fare for the round trip being two dollars. An earlier start may be made from Thornton by private conveyance, which must be arranged for in advance. Accommodation for the night may be secured at Cochiti in the Mexican boarding-house, or Government school.

The town occupies a picturesque site on a broad plain facing and about thirty feet above the river. Contrary to the custom in pueblos, the houses as a rule are detached, and are generally of a single story. Occupying a prominent place in the unusually large plaza are the great circular walls of the kiva or estufa, projecting like a turret to the level of the surrounding houses. Of the secret mysteries which take place here practically nothing is known; for in spite of the fact that the Cochiti are nominally

Catholics, they are intensely conservative and still preserve their ancient religious rites



Estufa at Cochiti.

They have many public ceremonial performances, the best known and one of the most interesting occurring on July 14th.

Near the pueblo are many interesting shrines, where the priests make sacrificial offerings. The most famous of these is the so-called Potrero de las Vacas, where there is a pair of mountain lions sculptured from the living rock. Near Cochiti, among many other points of interest, is a famous cave, Arena Pintata, the walls of which bear some remarkable paintings in color.



General View of Santo Domingo Pueblo.

Cochiti is chiefly famous in recent times for the manufacture carried on by one or two individuals of large numbers of spurious antiquities in the nature of stone idols, averaging from two to three feet in height, large numbers of which may be seen in the collections of the various curio dealers of the country. The pottery of Cochiti, manufactured in considerable quantity, consists largely of vessels simulating animal forms, and large jars with floral ornamentations in color. Cochiti was the home for years of that well-known explorer of the Southwest, Adolph Bandelier.

Santo Domingo

This interesting and conservative pueblo, numbering about six hundred and fifty inhabitants, is located on the east bank



A Clown, Santo Domingo Ceremony.

of the Rio Grande River, two miles and a half west of the station of Thornton. It can be reached on foot in a half hour's time, or may be visited by means of conveyance from Thornton.

The streets, four in number, three running at right angles to the river, are very broad and dirty, but extremely picturesque. Here and there are the native ovens, piles of firewood and the rude kilns for firing the pottery. The adobe houses are never more than two stories in height, and are rather larger than the usual pueblo domicile. In one of the streets rises the great circular wall of the kiva with its ladder beams projecting far above the tops of the surrounding houses. There are many interesting features in the quaint old town, among them an old Spanish church in a fair state of preservation. Owing to the conservativeness of the inhabitants. they have retained many objects belonging to the old régime and of great interest to the tourists and the student of ethnology, although objects of this nature are not easily purchased. Pottery is made at Santo Domingo in limited quantities, consisting almost entirely of a variety of white ware with decorations in black.

Santo Domingo possesses many religious ceremonies of great beauty and interest, the best known being held annually on August 4th, and witnessed by a great crowd of white visitors from Albuquerque, Santa Fé and other New Mexican cities, as well as by many Indians from neighboring pueblos and from the Navaho and Apache country. The performance, preceded by



Plaza of Santo Domingo During Performance of Annual August Ceremony.

three days' secret rites, lasts from early morning until late at night, and consists of a series of dances in the plaza by two alternating groups of over one hundred men, women and children, all gaily and picturesquely dressed in native costume. In addition to the dancers in each group are about fifty musicians. About three hundred people thus appear during the day. The dance comprises numerous and complicated movements, given in such rhythm and precision as to compel the highest admiration. Of great interest are the antics of several fantastically dressed men who may be termed clowns. It is doubtful if a more striking pageant is offered the visitor by any tribe in America than may be seen on this day when the ceremony is at its full height.

San Filipe

This Keresen town of five hundred and fifty inhabitants lies on the east bank of the Rio Grande River, and may be reached by carriage from Thornton, or, better still, from the town of Bernalillo, from which it is situated three miles. There is but little of general interest to the tourist in the town, and one may perhaps see quite enough.



Spanish Church, San Filipe.

perhaps see quite enough of it from the windows of the train en route to Albuquerque.

Albuquerque

For the visit to the remaining pueblos included in this group, Albuquerque will be the most convenient starting-point, for in this enterprising and rapidly growing modern city of New Mexico may be found good hotel accommodations, together with a number of well equipped livery stables. With the improvements recently made by the Santa Fe Railway, the desirability of Albuquerque as headquarters is greatly increased.

In connection with a station unique in the West is the Alvarado, a Harvey hotel, unsurpassed for beauty and convenience. Near the hotel and forming part of an extended structure, built in the Spanish Mission style, are two buildings devoted to the Indian collections. The first contains a permanent exhibit, representative of the archeology and ethnology of the western tribes, and forming one of the most creditable museums west of the Mississippi River. The second structure is an immense hall, beautifully and tastefully arranged with native goods from nearly every part of America and from Africa and the islands of the Pacific. The objects in this hall are for sale, and it is doubtful if there is another salesroom so well stocked with rare and genuine specimens. The collector or relic hunter would be exceedingly exacting who could not find something here to suit his desire. Travelers are strongly recommended to break their journey and spend at least one day in these two charming and fascinating buildings, filled with rare and costly baskets, beautiful blankets, symbolic pottery, and strange and curious ceremonial objects.

For a visit to the four pueblos of Sandia, Santa Ana, Sia and Jemez, which all lie north of Albuquerque and to the west of the Rio Grande River, the Albuquerque and Jemez Springs stage line will be found most convenient. The stage leaves Albuquerque on Tuesday, Thursday and Saturday mornings at five o'clock, making the journey through to Jemez Springs at the end of the stage route the same day, and passing the four above-named pueblos en route.



Sandia

This small Tañoan pueblo, occupying a gentle rise from the bottom lands on the west bank of the Rio Grande, numbers less than one hundred and fifty inhabitants. It may be easily seen as the train approaches the small station of Alameda, a short

In the Indian Room, Hotel Alvarado, Albuquerque.



Church at Sandia.

distance above Albuquerque. The pueblo may be reached by means of the stage, which passes near the village at halfpast six in the morning, the fare from Albuquerque being two dollars.

Santa Ana

This is a Keresen pueblo lying about fifteen miles beyond Sandia and about eight miles off the line of the stage from Albuquerque to Jemez Springs. It may be reached by private conveyance in six hours from Albuquerque. The pueblo is situated in the valley of the Jemez River, nine miles below Sia. The valley at this point is so sandy as to be nearly unproductive, and hence the people of Santa Ana desert their pueblo in spring and summer and take up their abode among their fields along the Rio Grande. The adobe houses of the town of Santa Ana rise in terraces to a height of two stories and face two long streets, parallel to the river. Back of the town rises a precipitous mesa to a height of twelve hundred feet. On the summit the small flocks of the Indians find scanty Near the village are many corrals, built of cedar. support. The village boasts a guest house where strangers are entertained, and a church in good repair, with some pretense of architecture.

A considerable amount of pottery is still manufactured in this pueblo, it being as a rule the white ware with ornamentation in black or red, somewhat resembling the well-known pottery of Zuñi.

Sia

This is the smallest of all the Keresen pueblos, numbering about one hundred inhabitants. The pueblo occupies a small elevation which rises from the bank of the Iemez River and is six miles northwest of Santa Ana



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and seventeen miles west of Bernalillo. The pueblo may be reached in seven hours by stage or private conveyance from Albuquerque.

Mrs. Stevenson characterizes the early history of Sia as follows: "All that remains of the once popular pueblo of Sia is a small group of houses and a mere handful of people in the midst of one of the most extensive ruins of the Southwest, the living relic of an almost extinct people and a pathetic tale of the ravages of warfare and pestilence. This picture is even more touching than the infant's cradle or the tiny sandal found buried in the cliff in the canyon walls. The Sia of to-day is in much the same condition as that of the ancient cave and cliff dweller as we restore their villages in imagination."

Most of the houses are not more than one story in height, and are built of water-worn boulders and volcanic scoria laid in rows between adobe mud. In the more modern houses the outside is plastered and the whole treated to a coat of whitewash. Owing to the lack of water supply the people have never been successful at agriculture and are obliged to resort to other means for a livelihood. The women of the pueblo are famous potters and manufacture beautiful ware of white, with red and brown decoration, which they dispose of to their more prosperous neighbors at Santa Ana and Jemez in exchange for agricultural products.



Pueblo of Jemez

Owing to their peculiar environment, the people of Sia have not made much progress toward the civilization of the white man, but have clung tenaciously to their old rites and customs. It was owing to this fact that Mrs. Stevenson made an exhaustive study of the Sia, a detailed account of her investigations forming one of the most valuable papers to be found in the Annual Reports of the Bureau of Ethnology.* It requires but a superficial examination of this extended paper to show how great is the error when the conclusion is reached after a hasty examination of any of these pueblos, that there no longer exists rites, traditions or customs of the ancient times. The great annual festival at Sia takes place on August 15th.

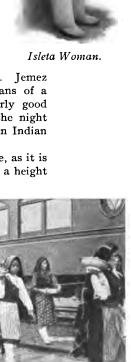
Jemez

This is a Tañoan pueblo of over four hundred inhabitants, situated seven miles north of the pueblo of Santa Ana and on the Jemez River. It is near the terminus of the Albuquerque and Jemez Springs stage route, from which former city it may be reached in nine hours, the round trip fare being twelve dollars.

may also be reached directly from Thornton by means of a private conveyance from the livery stable, on a fairly good road thirty miles in length. Accommodation for the night may be had in the village with Mr. Charles Spader, an Indian trader and the postmaster.

The location of the village is extremely picturesque, as it is near the mouth of a canyon the walls of which rise to a height

of nearly two thousand feet. To the northwest of Jemez at a distance of about thirteen miles are the ruins of an extensive pueblo, claimed by the present people of Jemez as the ancient



Isleta Women Offering Pottery to Santa Fe Train Passengers.

^{*}Vol. XI.



Pueblo of Isleta.

home of their ancestors, while intervening are the ruins of several smaller pueblos. The houses of the present pueblo are built close together, are of adobe and generally of two stories in height. They face two streets which extend both north and south of the long, narrow and irregular plaza. On the southeast side of the village are several hard earth circular areas used as threshing floors, where wheat is threshed by the hoofs of horses, and winnowed by means of primitive shovels aided by an unfailing south breeze. In addition to a Catholic church and mission, Jemez has a Presbyterian mission school.

The people of Jemez raise bountiful crops of corn and wheat, and are in a fairly comfortable condition.

At Jemez dwell the last survivors of the old pueblo of Pecos, a Tañoan pueblo of the Glorieta Mountains east of Santa Fé, which was abandoned in 1830 and whose history has been so thoroughly investigated by A. F. Bandelier.

Isleta

This is by far the largest of the Tañoan pueblos, numbering over a thousand inhabitants. It is also the most westerly of the Tañoan pueblos except the little village of Hano, which occupies one of the Hopi mesas. The village is pleasantly located on the west bank of the Rio Grande River, about thirteen miles south of Albuquerque, and within a stone's throw of the main line of the Santa Fe Railway. There is a station at the village, and hence the pueblo may be easily visited by leaving the railroad

at the station or by a drive of about two hours from the city of Albuquerque. The drive from Albuquerque to the village is strongly recommended.

Although of unusual size for an Indian pueblo, Isleta has lost many of the characteristics of a true Indian town, this being due probably to the presence of a large Roman Catholic church and the constant attendance of a priest. The country about the pueblo is fertile in the extreme and is crossed and recrossed by irrigating ditches, which make possible prosperous crops of alfalfa and wheat.

Notwithstanding the presence of a well preserved church, together with the well kept quarters of the padre, Isleta still possesses an estufa or native temple, in which certain ancient religious observances are retained, and from which the priests appear at the time of their annual festival on August 28th. The visitor probably will be struck at once with the fact that. modern as the pueblo seems in many ways, he will probably be unable to obtain admission to this kiva, or half-sunken, circular, underground temple, which may be entered only from the hole The houses and streets of the pueblo are well kept in the roof. and clean, and inasmuch as the dwellings of the village are, like the Mexican quarters generally of this region, of a single story, the pueblo covers a large area. Within the houses are many evidences of the white man's civilization, such as beds, chairs and domestic utensils; but the primitive method of grinding corn into meal is still retained and in the majority of the houses one may see in the corner a bin with a stone metate for this purpose.

Isleta was for many years the home of that interesting writer, Mr. Charles F. Lummis, who has written impressions of his visit here, in his delightful books, "Strange Corners of Our Country," and "A Tramp Across the Continent."







The Western Keresen Pueblos

Laguna - Acoma - Enchanted Mesa

VISIT to the two pueblos of Laguna and Acoma, and the famous Mesa Encantada or enchanted mesa, necessitates but a single break in the journey to the west after one has left Albuquerque, which is made at the station of Laguna, sixty-six miles west of Albuquerque. Inasmuch as the Unlimited passes through Isleta late at

night and consequently reaches Laguna still later, perhaps the author's experience in reaching these two pueblos may be of value. The overland train was left at Albuquerque in the evening and on the following morning a freight train was taken for Isleta, reaching there about nine o'clock in the morning. Three hours were devoted to Isleta, whereupon another freight train was boarded, arriving at Laguna about four o'clock in the afternoon, thus affording an opportunity for exploring this latter pueblo during the remainder of that day. Early the following morning the journey to Acoma was begun.

Laguna

This is the largest of the Keresen pueblos and numbers over eleven hundred inhabitants. By advance arrangement with R. G. Marmon, whose new home near the depot has been specially fitted up for transient travel, good room and board may

be secured at Laguna; or fair accommodation may be had at the section-house adjacent to the station. Should the tourist not be able to stop at this village he may compensate himself with the thought that should he pass it in the daytime he will have a good opportunity of seeing a large portion of its people, inasmuch as the train passes along the edge of the town and the majority of the inhabitants proceed to the station, all eager to dispose of their pottery wares.

The pueblo of Laguna is really but one of a group of nine villages. It is, however, the largest, and the other villages may be considered summer residences while the people are looking after their crops. Although the people of Laguna are brought in close contact with the railroad, which naturally has something of a civilizing influence upon them, and although they have long since been accustomed to the teachings of a Spanish priest, and in more recent times to that of a missionary of the Presbyterian church, the people possess much more of their native life than was to be noted in the village of Isleta. The present location of the village, however, is not ancient, inasmuch as the town was founded toward the close of the eighteenth century, by clans from Acoma, Cochiti and other pueblos.

The appearance of the town as seen from the railroad is rather picturesque as it nestles against the hill, the houses rising as a rule to the height of two stories. They are, as is general in all Indian pueblos, constructed with flat roofs which project over the walls. Within, the dwellings show traces of American influence, yet here and there may be seen in these dwellings rudely fashioned figures or dolls on the walls, and many other evidences of a vigorous native life. Light is admitted into many of the houses through large, thin blocks



Pueblo of Laguna from Santa Fe Train.

of fluorite. Contrary to custom in older pueblos, the houses are not built of stone, but of adobe, after the fashion of the Mexicans, the outside being plastered and having the natural color of the soil.

Although the men of the pueblo have entirely given up the old native costume, the women still cling to the dark blue native-made dresses which have been worn for hundreds of years, while on their feet they wear a moccasin of buckskin, which terminates in a long broad strip which is wound many times about the lower leg, similar to the style seen at Isleta. The pueblo boasts no kiva. A few traces of the ancient religious ceremonies have been preserved, which, however, have been somewhat modified by the influence of the Spanish priests.

The great industry of the women is manufacturing pottery, which they produce in very large quantities, and offer to the passengers as the train stops. This pottery is of a great variety of forms, generally graceful and beautiful in outline and neatly decorated in red and brown colors, over a white ground. The women seem never to have successfully acquired the art of firing the pottery, and as a consequence it is not as serviceable as that produced by their neighbors at Acoma. With the exception of the Acoma pottery, however, it is the best pottery which is offered to the tourist along the line of the Santa Fe Railway. It is possible, by means of a short stroll through the village, to witness the manufacture and burning of the pottery in all its stages.

One of the religious festivals of Laguna has thus been described by Mr. Lummis, in "A Tramp Across the Continent":

"The house-tops were brilliant with a gorgeously appareled throng of Indian spectators, watching with breathless interest the strange scene at their feet. Up and down the plaza's smooth floor of solid rock the thirty dancers were leaping, marching, wheeling, in perfect rhythm to the wild chant of the chorus, and to the pom-pom of a huge drum. Their faces were weirdly besmeared with vermilion and upon their heads were war-bonnets of eagle feathers. Some carried bows and arrows, some elaborate tomahawks—though that was never a characteristic weapon of the Pueblo Indians—some lances and shields, and a few revolvers and Winchesters. They were stripped to the waist and wore



Laguna during January Ceremony.

curious skirts of buckskin reaching to the knee, ponderous silver belts—of which some dancers had two or three apiece—and an endless profusion of silver bracelets and rings, silver, turquoise, and coral necklaces and ear-rings, and sometimes beautifully beaded buckskin leggings. The captain or leader had a massive necklace of the terrible claws of the grizzly bear. He was a superb Apollo in bronze; fully six feet three inches tall, and straight as an arrow. His long raven hair was done up in a curious wad on the top of his head and stuck full of eagle feathers. His leggings were the most elaborate I ever saw—one solid mass, being of elegant bead-work. He carried in his hand a long, steel-pointed lance, decorated with many gay-colored ribbons, and he used this much after the fashion of a drum-major.

"When we first arrived upon the scene, and for half an hour thereafter, the dancers were formed in a rectangle, standing five abreast and six deep, jumping up and down in a sort of rudimentary clog-step, keeping faultless time and ceaselessly chanting to the 'music' of two small bass drums. The words were not particularly thrilling, consisting chiefly, it seemed to

my untutored ear, of 'Ho! o-o-o-h! Ho! Ho! Ah! Ho!' but the chant was a genuine melody, though different in all ways from any tune you will hear elsewhere. Then the leader gave a velp like a dog, and started off over the smooth rock floor, the whole chorus following in single file, leaping high into the air and coming down, first on one foot and then on the other, one knee stiff and the other bent, and still singing at the top of their lungs. No matter how high they jumped, they still came down in unison with each other and with the tap of the rude drums. No clog-dancer could keep more perfect time to music than do these queer leapers. The evolutions of their 'grand march' are too intricate for description, and would completely bewilder a fashionable leader of the German. wound around in snakelike figures, now and then falling into strange but regular groups, never getting confused, never missing a step of their laborious leaping. And such endurance of lung and muscle! They keep up their jumping and shouting all day and all night. During the whole of this serpentine dance, the drums and the chorus kept up their clamor, while the leader punctuated the chant by a series of wild whoops at regular intervals. All the time too, while their legs were busy, their arms were not less so. They kept brandishing aloft their various weapons, in a significant style that 'would make a man hunt tall grass if he saw them out on the plains,' as Phillips declared."



Tablita Dance, Acoma.

Acoma

This is a Keresen pueblo of five hundred and fifty inhabitants, and may be reached from Laguna by means of a carriage in about three hours. Conveyance may be secured from Mr. Bibo, the trader at Isleta, or from Mr. Marmon, the usual fare being five dollars for one passage, or three dollars each for two. Competent drivers are furnished who speak both English and Indian tongues. The trail after leaving Laguna soon crosses the Puerco River, when one ascends by a sandy road to the summit of a rough and wild plateau shaded with a thick growth of piñon and chaparral. Thence one passes by many twists and turns down into a somewhat level plain. To the



Old Spanish Church, Acoma.

left of the road stands the lofty Mesa Encantada, like a plinth awaiting its statue, which we shall notice on our return, while beyond, on the western edge of the plain, rises a rocky precipice, nearly four hundred feet in height, upon which stands Acoma, "the most wonderful aboriginal city on earth, cliff built, cloud swept, matchless."

After a visit to the pueblos of the Rio Grande, which occupy as a rule unromantic sites along the river, surrounded by fields of alfalfa and orchards of peaches, the first sight of this lofty perched pueblo must come as a revelation. As one nears the pedestal upon which Acoma stands it seems that he is looking upon the ruins of some series of castles of giants, for the rock, in the lapse of the ages during which it has been exposed to wind and weather, has been carved into battlements, buttresses, walls, columns and deep recesses. The view on every hand from this point is a scene not soon forgotten. The trail continues on around to the right of the mesa, passing enormous sand dunes which have found a resting-place near the sides of the rock, as though overcome in their attempt to overwhelm the very mesa itself.

Passing on and up over the side of this heap of sand, which rises and falls like sea billows, one finally comes to a precipitous trail which leads up to the mesa summit. Here is a pueblo which occupies a position where in 1540 it made stout resistance to Coronado, and where from that day to this it has successfully resisted foes both red and white, and where in all probability it made resistance against the fierce marauding bands of Navaho and Apache many hundred years before Coronado began his march.

One is immediately struck on entering the pueblo with its great regularity, there being three long parallel rows of houses extending across the flat summit, each row consisting of houses of terraced form and three stories in height. The height of the rock and adobe built houses is about forty feet, while the rows themselves are a little over a thousand feet in length. It is difficult to conceive the infinite toil it required to build these houses, the material being transported long distances on the backs of human burden bearers.

Between the three rows of houses are two long, narrow streets of rock. On one side of each street is the first story or terrace of the house, while on the opposite side is the rear wall, blank and forbidding, of the third story houses. One of the streets near the center of the village assumes unusual width, and here is the plaza in which the dances and other religious ceremonies are held. Entrance to the houses may be had, as a rule, only by means of a ladder which leads up to the roof of the first terrace, where one may pass to the lower floor or enter by means of doors to the rooms of the second terrace, or pass again by a ladder to the third story rooms. Here and there along the streets may be seen conical ovens, probably borrowed from the Spaniards.

On the east side of the village, occupying the edge of the cliff, stand the ruins of an ancient adobe church, its lofty outlines sharply silhouetted against the sky. This church is one of the wonders of the Southwest and is hardly less interesting than Acoma's terraced houses. One side of the churchyard is "made ground," its retaining wall, massive in character, being built up from the cliff. The adobe material for this church, as well as that for the houses of the village, was brought from the plain far below, upon the backs of men, toiling upward over the precipitous and forbidding trail. In the crumbling walls of this old church may be learned in epitome one of the many chapters in the history of this marvelous Southwest. The story is this:

The Spanish priests on their arrival were uniformly treated with great consideration, and easily gained a foothold. nearly all of the pueblos, as here at Acoma, they succeeded in winning the good graces of the natives, which resulted in the rearing of a pretentious place of worship, fitted up within in barbaric splendor, with lofty towers on the outside surmounted with bronze bells of Mexico or Spain. Within the walls of these churches for many years the priests met the Indians on common ground, and the old pagan ceremonies continued to be enacted, but with new names and in new form. But from time to time. now in this pueblo, now in that, the priests, for one cause or another, lost their power over the people and in many of the pueblos were entirely driven out, and the old church was permitted to fall into decay, but in the native religious ceremonies there survived for many years after, and even still survive, curious strains of the Catholic religion. The most important and best known ceremony is held annually on September 2d.

Acoma, though its church is in ruins, is still visited by a padre from time to time, the service embracing strange offerings and dances never known in the old world.

The men of the village of to-day cultivate their fields, which lie at a distance of some fifteen miles from the pueblo. They are not unmindful of the advantages to be derived from the simpler kinds of agricultural implements to be found at the stores of the trader, and evidences of this wisdom may be seen in the houses and store rooms, as well as in the horses and flocks of sheep in the valley below.



Thomas Moran and Party at foot of Acoma Mesa.

The life of the woman of the pueblo is not unlike that of the women of other pueblos. Much of her time is spent in carrying water from the spring at the foot of the mesa, or from the great reservoir on its summit, in which is stored the water from the winter and spring rainfalls, and which furnishes an almost inexhaustible supply. In fact, to this so-called "ladle of Acoma" is probably due one of the secrets of the stubborn resistance which the town has been able to make toward its enemies, and which will exert a great influence toward the retention of the village in its present almost inaccessible location. Much of the woman's time is also spent over the metate or mealing bins, which may be seen in every house, where she converts corn into meal.

The chief ability and glory of the Acoma woman is in the manufacture of pottery. This art has been continued in an unbroken line from ancient days to the present. Acoma pottery is famous throughout the Southwest for its beautiful and graceful form and for its carefully applied decoration. Furthermore, the Acoma woman understands thoroughly the art of firing pottery and making vessels of thin, graceful outline. The finished product has a sonorous ring quite in contrast to the dull, leaden sound so characteristic of much of the inferior pottery found among the upper Rio Grande pueblos. The gracefulness of the Acoma pottery is seen to its best advantage



A Zuñi Trader at Acoma.

when it is skilfully poised upon the heads of a long line of women passing to and fro between their houses and the reservoir in their daily journey for water.

Mr. Lummis has spoken thus of his reception, and impression of Acoma, in "A Tramp Across the Continent":

"We were handsomely entertained in the comfortable and roomy house of Martin Calle, the seven-times governor of the pueblo—a fine-faced, kindly, still active man of ninety, who rides his

plunging broncho to-day as firmly as the best of them, and who in the years since our first meeting has become a valued friend. With him that day was his herculean war-captain, Faustino. I doubt if there was ever carved a manlier frame than Faustino's; and certain it is that there never was a face nearer the ideal Mars. A grand, massive head, outlined in strength rather than delicacy; great, rugged features, yet superbly moulded withal—an eye like a lion's, nose and forehead full of character, and a jaw which was massive but brutal. calm but inexorable as fate. I have never seen a finer facefor a man whose trade is war, that is. Of course it would hardly fit a professor's shoulders. But it will always stand out in my memory with but two or three others—the most remarkable types I have ever encountered. One of the Council accompanied us, too, a kindly, intelligent old man named Jose Miguel Chino-since gone to sleep in the indeterminate jumble of the gray graveyard.

"In a 'street' paved with the eternal rock of the mesa were a hundred children playing jubilantly. It was a pleasant sight, and they were pleasant children. I have never seen any of them fighting, and they are as bright, clean-faced, sharpeyed and active as you find in an American schoolyard at recess. The boys were playing some sort of Acoma tag, and the girls mostly looked on. I don't know that they had the scruples of the sex about boisterous play. But nearly every one of them carried a fat baby brother or sister on her back, in the bight of her shawl. These uncomplaining little nurses were from

twelve years old down to five. Truly, the Acoma maiden begins to be a useful member of the household at an early age.

"Coming back from an exploration of the great church with its historic paintings, and the dizzy 'stone ladder' where the patient moccasins of untold generations have worn their imprint six inches deep in the rock, I found the old governor sitting at his door, indulging in the characteristic 'shave' of his people. He was impassively pecking away at his bronze cheeks and thinking about some matter of state. The aborigine does not put a razor to his face, but goes to the root of the matter—plucking out each hirsute newcomer bodily by pinch of fingernails, or with knife blade against his thumb, or with tweezers.

" * * * Then the runners and the judges went down to the plain, while every one else gathered on the edge of the cliff. At the signal, the twelve light, clean-faced athletes started off like deer. Their running costume consisted of the darkblue patarabo, or breech-clout, and their sinewy trunks and limbs were bare. Each side had a stick about the size of a lead-pencil; and as they ran, they had to kick this along in front

of them, never touching it with the fingers. The course was around a wide circuit which included the mesa of Acoma and several other big hills. I was told afterward that the distance was a good twenty-five miles. The Acoma boys, who won the race, did it in two hours and thirty-one minutes — which would be good running, even without the stick-kicking arrangement."

The wonders of Acoma, the marvelous effect of desert, plain and blue sky are not to be absorbed in a single day, and one could spend many days in the fascinating contemplation of rugged nature



The Horse Trail, Acoma.



The Enchanted Mesa.

and the still more wonderful aerielike village made by the hand of man. Except in the manufacture of pottery, the people of Acoma make no provision for the entertainment of the visitor, and all too soon we shall be obliged to set out on the return journey to Laguna for that greater journey to the west, where larger, more primitive and more interesting pueblos await us.

The Enchanted Mesa

This enormous pinnacle of rock which seems to rise sheer out of the plain, and to which we gave but scant attention on the journey to Acoma, must now be noted in more detail. According to the ancient tradition the summit of this rock, the so-called Mesa Encantada, was in ancient times the home of the people of Acoma. It is said there took place a mighty cataclysm, by means of which the single trail, so steep and precipitous, was broken away from the mother rock. Upon the summit were left a remnant of the village to perish, the majority of the inhabitants being engaged at the time in the small villages in their cultivated fields.

This tradition, handed down from one generation to another, and early noted by the Spaniards, was generally believed.



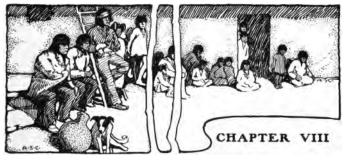
Zuñi Katcina Dance.

Two years ago, however, a representative of one of the Eastern universities decided to investigate the truthfulness of the legend. The ascent of the rock was made with difficulty, but nothing of interest was found. Shortly after, however, Mr. F. W. Hodge, then of the Bureau of Ethnology, and one who had long been familiar with the people of Acoma and their traditions and with the Southwest in general, revisited the summit of the mesa, and not only there, but in the talus, found unmistakable evidence of a former and ancient occupation—and thus was the old tradition of the Enchanted Mesa verified.





From a Zuñi Housetop.



Zuñi and the Seven Cities of Cibola

On the Way - Thunder Mountain - Halona - Zuñi - Industries - Shrines and Ruins



NCE more we board the westward Unlimited, our destination this time being Gallup, which town we reach after a journey of ninety miles, passing on the way (its position being plainly marked by a sign-board) the Continental divide, at an elevation of seven thousand two hundred and fifty-seven feet.

Gallup is the starting-point to Zuñi, the largest of all pueblos. At Zuñi, that strange genius, Frank Hamilton Cushing, passed many years of his life, during which time he successfully penetrated, as no other ethnologist has done, the very holy of holies of the Indian mind.

Gallup has several livery stables, which provide conveyance for the round trip to Zuñi, at four to six dollars per diem, according to the party's size and the length of time required. The ride itself is a pleasant one and may be made in a comfortable carriage in eight hours. There is a trading post about half way on the route where the noonday meal may be obtained. The road throughout its length is good, passing over a rugged country always interesting, and penetrating in part of its length a region which formerly was a great forest of odoriferous pines, and which to-day yields a good supply of coal.

A little further on we behold rising up out of an open plain Toyalone or Thunder Mountain, a lofty plateau, the home and shrine of the war god and the herald of Zuñi. Here the sacred peaks of the strangely sculptured Kwiliyalone or Twin Mountain are seen, and a few minutes later we behold a large communal city, the houses of which rise like a pyramid to the height of five stories, occupying a level plain on the southern bank of the Zuñi River.

Zuñi is the heritor of the once famous seven cities of Cibola, the story of the search for which forms one of the most interesting chapters in the history of the great Southwest. original seven cities have long since been abandoned, and their sites, like those of many other former Zuñi towns, are to-day marked only by irregular mounds of earth from which project here and there, faint traces of the walls of the houses. Many of these ruins may be found only on the summits of rocky hills, or under the shelter of overhanging cliffs. Nor in 1540 were the seven cities of Cibola located on defensive sites, and even as early as the middle of the seventeenth century the great house cluster of the Zuñi was on the north bank of the river. where, without natural defense, they were obliged to hold in check the marauding bands of Apache and Navaho. Toyalone's summit, however, the present home of the war god, they found a retreat where they fled in 1540, and again in 1680. to escape the wrath of the Spaniards. Here it was, beginning in 1680, that they remained for twelve years, before they consented to take up their abode in the plain below.

From a distance, and especially from the south, Zuñi may be seen for many miles, having the appearance, owing to the variety in the height of its houses and the irregularities of the ground, of one of the great lava masses which may be seen in this region. Not only does Toyalone tower above the pueblo, but over the stately forms of other sacred peaks of the Zuñi.

Although so close to the very city itself, we may pause, before crossing the narrow stream which still separates us from the town, at a large, substantial two-story stone house, built under Mr. Cushing's direction. This house stands on the ruins of Halona, one of the earliest cities of Cibola, the site of which was explored by Mr. Cushing in 1886. Here we shall be able to arrange for our accommodation for the night, as well as for refreshment during the day, the building being now occupied by the Indian trader.

Passing the river by means of a narrow plank bridge, we are confronted at once by the many corrals of adobe, which



General View of Zuñi from Southwest.

almost entirely surround Zuñi. To the traveler fresh from the streets of Acoma, probably the much-heralded Zuñi is somewhat of a disappointment; for the city has not that commanding position on the summit of a lofty mesa which constantly inspires the feeling that one has left this modern world.

Zuñi is rapidly becoming Mexicanized, for adobe is gradually replacing stone, and there is a painful abundance of doors and windows opening out on to the streets. However, one does not walk far through the tortuous streets until he fully realizes that in spite of the modernness of the houses, there is an atmosphere prevading the town which is older than that of the Spanish conquest. The traveler will probably look for evidences of protection; in the site there was presumably nothing of protection, nor is the town surrounded by a wall like Taos; but he may see in the older southeastern portion of the town that the houses are extremely compact and rise tier above tier, to the height of five stories, and that this great mass is much larger in size than any similar house pyramid which he has seen in any other pueblo. He will also notice that the roofs of

the fifth-story houses are extensive in area, easily permitting the belief of the statement of the early writers, that formerly the town was seven stories in height.

The streets, after those of Acoma, seem exceedingly short and tortuous. The view on every hand is restricted by high walls rising up and blocking off the passage, seemingly, in every direction; but after several turns we finally walk through a covered passageway and find ourselves in an unusually large, irregular plaza. In its center are the remains of an old Spanish adobe church, at the back of which is a burying-ground surrounded by a low adobe wall. The old church ruins are neither in so good a state of preservation nor so large and imposing as those at Acoma, while the doctrines early taught by the padres have been even more completely forgotten; in fact the Zuñi are decided pagans.

Continuing our preliminary survey of the village, we find that the region of the town lying to the west of the church seems more modern, and the houses do not rise to a greater height than two or three stories. There is much to prove that this part of the town has been added in comparatively recent times.

One can not have gone even a short distance along the streets of Zuñi before he has become impressed with the fact that while the walls of the houses are, as a rule, well kept and neatly plastered, the streets are not clean. Perhaps this unfavorable impression of the condition of Zuñi streets is heightened by the presence of innumerable bob-tailed and disreputable dogs, bob-eared donkeys, scrawny chickens and black razor-backed pigs; but then, no one disputes the right of these domestic creatures to their share of the streets, nor would Zuñi or any other Indian pueblo be complete without them.



A Zuñi Katcına Dance.

There are a great many ladders in Zuñi, in fact ladders spring up here and there out of the streets and from the roofs of houses until there seems to be a very wilderness of masts. Vieing only in number with the ladder poles are the chimneys, which rise from the flat roofs of the Zuñi houses and bear a superficial resemblance to dwarfed bamboo poles of gigantic thickness; for the chimneys consist simply of many earthenware vessels from which the bottoms have become detached by accident, one being placed above the other.

Even on entering the ordinary Zuñi home we still find the same evidence of neatness and precision, which, as a rule, characterizes the exterior of the houses, and there is an apparent absence of those objects which we ordinarily expect to find in a primitive pueblo. To be sure, in practically every house are to be found the mealing bins, and there is the fireplace in the corner, where the bread is baked into thin sheets or is boiled in corn husk packets in boiling water. Of weaving we shall see but little, as the Zuñi men of to-day content themselves with loosely made garments of cotton after the fashion of the whites, while the few garments worn by the men in the ceremonies, together with the clothing of the women, are very largely purchased from the Hopi. The pottery industry is carried on upon a large scale, and one can not fail to be impressed at once with the beauty of the Zuñi pottery or the semi-geometric designs which they follow with a simple bit of vucca stem, in colors of black, brown and red.

The absence from the streets of those huge, circular, adobe, towerlike structures which form such a characteristic feature of the Rio Grande pueblos is also at once noticed. It seems that neither the circular estufa of the eastern, nor the rectangular kiva of the western pueblos, was ever known at Zufii; but, instead, special secluded rooms were set apart in which the priests chanted the ritual and performed the ceremonies relating to their religious rites. Of these rites a great many exist in Zufii, there being no month in the year when it is not possible to behold one or more performances of this nature. The Zufii, however, in spite of a certain veneer of civilization which hovers over the village, are extremely conservative, and few indeed are the strangers who have ever witnessed any of these secret performances. Very many ceremonies, however, have con-

nected with them elaborate performances in the open air in the streets, which may be seen by all who may happen to be in the village at the time.

Perhaps the most famous of these dances is that known as Shalako, held usually in November, and always witnessed by a great crowd of visitors, who gather from towns far and wide from both New Mexico and Arizona. Other ceremonies, abbreviated and extended, follow one another throughout the Zuñi calendar year with the greatest profusion.

In disposition the Zuñi are gentle, favorably disposed toward strangers and are always willing to enter into the preliminary negotiations for barter. Pottery, of course, can be secured in large or small quantities, and it is not at all difficult to purchase many varieties of stone implements which are in daily use, some of them, such as stone hatchets, being of exquisite workmanship and finish. The ordinary objects of ceremonial dress may also be secured, together with the many strand necklaces of shell and turquoise, in the manufacture of which the Zuñi are experts. Certain of the Zuñi men are also

expert silversmiths and make many objects from American or Mexican coins, such as finger rings, bracelets, belt buckles,

rosettes, etc., which find their way to tourists.

Many native industries may be seen in the course of a single day, such as the pottery-making, the spinning of yarn and the manufacture of cloth or cutting and sewing of moccasins, the drilling and grinds

ing of the shells for the bead necklace, the building or repairing of the adobe corrals, and even the building of new houses—for the condition of the villages is constantly changing, old houses falling into decay or being torn down and replaced with new houses and more modern conveniences.



Zuñi Drilling Turquoise.

Surely one or more hours of this day should be spent in at least a hasty examination of some of the many shrines and ruins which surround Zuñi on almost every side. Especially should those who are able not fail to visit the summit of Toyalone. Near the ruins, in one of then arrow caves in the great rock, is an interesting shrine, said to be dedicated to the Priests of the Bow, a powerful Zuñi secret fraternity. Here may be seen many prayer offerings as well as fragments of bones and skulls of bears, mountain lions and wolves, deposited as offerings. Many other shrines as well as rock pictures abound in this vicinity; but of greater interest are the shrines on the summit.

By dint of much hard climbing and scrambling, the top of Thunder Mountain is finally gained. There are at least two places on this lofty plateau worthy of a visit. First we may pass the ruins of that ancient stronghold where the Zuñi on two occasions successfully defended themselves against their foes; then we may continue along the trail to the shrine of the War God, where, up to the present time, the Zuñi continue to make their offerings of prayer sticks, symbolic arrows and netted shields, sacrifices of skulls of wild animals, and turquoise to the gods in whose honor the shrine is dedicated, the highest in the Zuñi pantheon.

Occupying another portion of the plain toward the northeast may be faintly seen the outlines of the ruin of Hawikuh, memor-

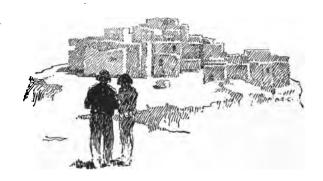


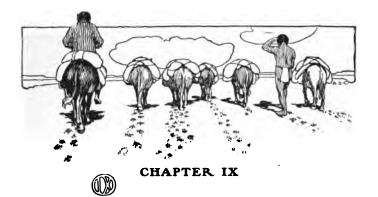
Thunder Mountain, near Zuñi.

able as the first village seen by Estevan, who there met his death, and consequently the first of the Zuñian villages beheld by European eyes. This Hawikuh was that famous city of Cibola, rising toward the plain which Niza beheld in 1539, and this was the pueblo stormed by Coronado in the summer of the following year.

Re-entering Zuñi we notice many eagles, confined in cages of loosely plaited cottonwood withes, passing a miserable and pitiable existence, awaiting the time when they shall be sacrificed with appropriate rites, in order that their feathers may be used as offerings to the gods.

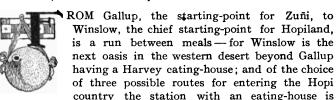
There is much that is new in Zuñi, but much that is exceedingly ancient, more than enough to interest even the casual vi.itor, and in fact to occupy the student of ethnology during the period of many lives; but for us, who travel by the Unlimited, the end of the journey is not yet; for Hopiland, pueblo life pure and undefiled, calls and beckons us further on to the west.





To Hopiland, Province of Tusayan

Holbrook, Winslow and Gallup-Painted Desert-The Three Mesas



preferable, other things being equal. There is also a Harvey hotel, where one is assured excellent meals, the luxuries of a bath, and other comforts which are greatly appreciated on the return from a desert journey.

Routes

There are many ways of getting into the Hopi country, but there are three commonly used routes, each of which has certain advantages. At the starting-point of each one of them conveyances may easily be secured for the trip. The three points are the stations of Holbrook, Winslow and Canyon Diablo, all along the line of the Santa Fe The Hopi country (or the province of Tusayan, as it was formerly called) stretches out north of these three stations; therefore one could go in from Holbrook, visiting first the easternmost of the Hopi villages and then passing on to those of the west; or he could go from Canyon Diablo to the western villages first; or from



the station of Winslow, lying about midway between these two stations, he could reach any one of the Hopi villages, the distance being about the same for all.

Holbrook has good livery stables and stores where a camp outfit and provisions for a journey may easily be secured. The cost for a conveyance depends upon the time involved. As a rule, from two to four persons can arrange a round trip journey, including camp outfit and necessary provisions for a trip of from six to ten days' duration, at a maximum cost of six dollars per day. Should the party be limited to one or two, and should they have their own camp outfit and provisions, this cost could be reduced considerably.

Holbrook possesses one advantage over the other two routes: the town is situated on the Hopi side of the Little Colorado River; consequently the question as to whether the river is fordable need not be considered. The Little Colorado, for brief lengths of time, is not fordable from either Winslow or from Canyon Diablo; but the writer, on several trips to Tusayan, both from Winslow and Canyon Diablo, has always found this capricious stream perfectly safe.

The distance from Holbrook to Walpi, the easternmost of the Hopi villages, is about eighty miles, a two days' journey, though with a camp outfit and wagon, three days are often needed. This route is more picturesque than either of the other two, though the routes from Winslow and Canyon Diablo are of great beauty.

Winslow, a much larger town than Holbrook, is a division point on the Santa Fe, and has several hotels and livery stables. Of the latter the writer is able to recommend, from much personal experience, that kept by Mr. Creswell. Of the hotels of Winslow, naturally there is no choice; for the existence of a Harvey hotel has been mentioned. The route from Winslow to Oraibi, the westernmost village, is not quite eighty miles, while the direct route from Winslow to Walpi is but seventy-five. The cost of the conveyance from Winslow is a little less than that from Holbrook. Driver and conveyance, for four, should cost not to exceed five dollars a day, passengers, of course, providing their own bedding and provisions.

Canyon Diablo has neither hotel nor livery stable. Mr. F. W. Volz, the Indian trader at this point, will, with advance



Hopi Going to Snake Dance.

notice, furnish excellent conveyance for the tourist who may desire to visit the Hopi country. Mr. Volz will also furnish a plentiful supply of bedding and provisions. He owns a trading post at "The Fields," which is about half way between the railroad and Tusayan, where passengers can get comfortable meals and a bed. Should one desire to go to Oraibi direct, this route is undoubtedly the shortest, being about seventy miles in length. Mr. Volz will, on sufficient notice, have a relay team ready at "The Fields," so that the journey from the railroad to Oraibi may be made easily between the arrival of the morning train and the evening of the same day. Should there be ladies in the party, and should it be possible to secure Mr. Volz's personal services for the journey, this route offers certain advantages not to be found by either of the other two, and the cost is about the same.

Of the journey itself, by whatsoever route we decide to go, not much will be said, for the reason that any attempt to give a proper conception of the marvelous charm of the desert would be hopeless.

The Journey

Leaving Winslow the road winds in and out among bits of shattered mesas which rise out of the desert. Then we enter the floor of an ancient lake of several miles extent, smooth as a table, and devoid of vegetation. Over this level plain the route is to the north, and we now reach the Little Colorado



Crossing the Painted Desert to Hopiland.

River, for the greater part of the year a sluggish stream, and usually almost devoid of water.

From the second river terrace to the north and northeast we may see many buttes or lofty pinnacles, rising from the level plain Behind us, to the south, we can trace the windings of the Little Colorado for many miles, while still beyond to the south we may see that great gap known as Chaves pass, which now seems no more remote than when we left it behind at Winslow, forty miles away. Slightly to the south of west rise the beautiful green wooded slopes of the San Francisco Peaks, towering above and dominating the desert for a radius of over a hundred miles, with that gigantic world wonder, the Grand Canyon, lying at their western slopes and still to our west and north. Finally, changing our direction to the northwest, we have again at our very feet the so-called Painted Desert.



En Route to Hopiland.

Down into that great plain on an August day the sun beats with an intensity which, as you see it quivering and dancing into the interminable distance beyond, fairly overwhelms you; but although the beauty of this painted desert fascinates, you feel that to stand much longer and look at it is to be consumed by its heat, for it seems to advance in waves like those of the sea. Turning your eyes along the scarred and seamed edge of

the mesa which lies at your feet in this direction, you may easily understand that this desert is painted, that it is not an optical illusion; for the very earth of the wash has been overspread with a hundred rainbows, as one stratum succeeds another, now red, now blue, now yellow, now white, now green, now black, one shade passing into another by almost imperceptible degrees.

From the summit of the terrace which we have reached we pass rapidly on, by a level but winding trail, to Volz's store at "The Fields." Projecting out of the valley north of us can be seen at a distance of twenty-five miles a great lofty promontory, Little Burro Springs. Beyond that, and projecting into the valley from another side, we see another promontory forty miles away, not so sharply outlined. On its rocky eminence stands Oraibi.

The Three Mesas

We are now in the midst of a great open plain, projecting into which from the north are three parallel tablelands or mesas, like three great stony fingers. Sharp pointed, long and narrow, to the northeast is the First or East Mesa, upon which are situated the villages of Tewa, Sichumovi and Walpi. Just to the left of this narrow finger and reaching further out into the dry, desert sea, stands the Second or Middle Mesa, the end of the finger being cleft, upon the eastern cleft being the villages of Shipaulovi and Mishongnovi, and upon the western cleft



Camp at Little Burro Springs.



Volz's Trading Post, The Fields.

the village of Shumopovi. Still to the left and almost due north we may behold the third stony finger, also cleft and broader than the middle finger. This is the Third or West Mesa, and upon it stands Oraibi, the largest, most ancient and most primitive of all Hopi villages. To distinguish any of these villages, however, from a distance we must look intently, for owing to the protective mimicry of their coloring they seem to be upward continuations of the living rock.

Naturally each village has its own special points of interest not to be found in any of the others, but in general they have much in common. All are upon the summits of mesas, the ascent to which is up the sides of a more or less precipitous cliff, three to four hundred feet in height. Below the villages are the cornfields, peach orchards and gardens. Each has its own spring or springs, its own temples, shrines and burial-grounds; and in every village the traveler, provided he does not force his way into the temple sanctuaries, will be kindly welcomed by the people; for the term Moki is a Navaho misnomer, these people calling themselves the "Hopituh," or Peaceful People.

After having gone through the formality of obtaining the consent of the Indian agent, we are absolutely free to roam as we like.

Taking the trail to the northeast, a journey of three hours brings us to the spring at the foot of the East Mesa. We are on the slope of a great table-land with its mountain-high billows of sand, massive cubes, towers, spires and pillars carved by the giant forces of nature and painted in matchless colors of red, yellow and brown. To the east is the valley, with its cornfields, and towering above us on the west the lofty, narrow mesa, up whose side we travel by a precipitous path, until, when we near the summit, we come to the great cleft or gap, whence the term "Walpi," the Place of the Gap. Turning to the left, under the shadow of a precipitous cliff, its sides carved with strange hieroglyphs, we finally gain the summit.

Tewa or Hano

We enter at once the little village of Hano or Tewa, with its one hundred and sixty inhabitants. This town was founded by people of Tañoan stock, who, two centuries ago, came wandering westward from the valley of the Rio Grande and were permitted to settle upon this spot, with the understanding that they were to assist a peaceful people in their defense against the Utes and Paiutes. Researches of Dr. Fewkes have shown that there are only eleven pure blooded Tañoan people remaining in this village, all the others having a mixture of Hopi blood. Nevertheless, the mother tongue has been kept in a comparatively pure state throughout more than two centuries of intimate contact with a foreign language. These Tewans or "Keepers of the Trail" are interesting from another point;



they are the most skilful potters of all this region, while the ware of old Nampeyo and her daughter have gone far and wide over the curio-loving world.

Sichumovi

Passing through Hano we enter the little village of Sichumovi, the smallest of all Hopi towns, numbering a scant hundred inhabitants. This village was founded, it is said, by certain clans of Walpi, who left their town on account of a disagreement. Beyond Sichumovi the barren rocky summit of the

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Walpi Foot Trail.

mesa narrows to the width of only a few feet, into whose surface have been cut deep trails worn by the moccasined feet of many generations.

Walpi

Again the summit of the mesa broadens slightly and we come to Walpi, the Place of the Gap, with its two hundred and thirty inhabitants. Walpi, owing to the long researches of Dr. Fewkes, is no doubt the best known of all Hopi pueblos, but here, as in the other two pueblos in this mesa, are many innovations in the houses. Families have deserted their homes for points more convenient to their fields and the springs in the valleys below, and the time may be at hand when the inhabitants will again take up their abode at the foot of the mesa.

Pass on through the streets of Walpi with its terraced house row on one side and the precipice on the other, pass through the arch, on out to the point of the mesa—what a panorama is spread out at one's feet! Below on three sides are the peaceful valleys, with here cornfields, there peach orchards, the interspaces being occupied by billows of ever-drifting sand. Beyond, rising out of the plain, are carved mesas and buttes, outlined in exquisite clearness, with great lava fields at their base, and beyond, more than a hundred miles away, Chaves pass, and in another, across the painted desert, the San Francisco Peaks. At our feet we behold the dim, irregular outlines of the ancient home of the Walpians, together with the faint outlines of an old, abandoned Spanish church.

Mishongnovi and Shipaulovi

Across the narrow valley, seven miles to the west, we come to the Second Mesa, ascending the steep side of which we enter Mishongnovi, second in size of Hopi villages, with its two hundred and fifty inhabitants. Descending a few steps westward from Mishongnovi we pass over a little gap in the mesa and again ascend the sides of a point upon which stands the little pueblo of Shipaulovi, The Place of the Peaches, with its one hundred and twenty-five people. Lofty and most picturesque is the location of this little modern town, formed since the days of the Spaniards, as an offspring of Shumopovi. Ascend to the flat roof of the eastmost house. From this vantage one can behold, not only the region to the south, but can actually look down upon

every other Hopi pueblo, while to the north his range of vision is apparently limited only by the power of the human eye.

Shumopovi

Descending from Shipaulovi to the level of the mesa we pass around the cliff by a trail of about four miles, or descend into the plain below and pass directly to Shumopovi, The Place of the Reed Grass. This is the least known and probably the most conservative, as it is the most isolated of all Hopi villages. It numbers about two hundred and twenty-five inhabitants.

Oraibi

Again descending into the plain and crossing the valley, we ascend by a comparatively easy trail to that oldest and largest Hopi pueblo, Oraibi. Oraibi numbers nearly one thousand inhabitants, and as Taos is to-day the easternmost of all pueblos, so, in Oraibi, we have come to the western limit of the living pueblos.

Oraibi occupies to-day the same spot where in 1540 Coronado, the first of the Conquistadores, penetrated this hitherto unknown world of Tusavan. Other pueblos have been characterized as friendly or conservative. Oraibi to-day is divided into two isolated camps, one of which is willing that the children should go to school, that the Government should assist them with wagons and agricultural implements; the other group, known as the conservatives or hostiles, in contradistinction to the liberals or friendlies, are unwilling to accept any proffer of assistance from the Government. What they require they are willing to pay for, and, above all, they desire neither interference nor reproach in the performance of their religious rites. Under our treaty with Mexico they are citizens; the Constitution granted to both white and black freedom to worship in his religion; and it did not intend to denv this privilege to the red man!





Domestic Life of the Hopi

Origin of the Hopi — Oraibi Pueblo — Houses — Dress — Fields and Orchards

HO are the Hopi? Where did they come from? These are questions which have not yet been satisfactorily answered, although, owing to the researches of ethnologists, we know that each village to-day forms a congeries of clans which have been assembled slowly and from many points of the compass. For the early home

of the Hopi we must enter the canyons of the north and look among the cliff ruins, or search the plains of the east, among the valleys of the south, or the plateaus of the west; for in all these directions ruins exist in almost countless numbers.

Linguistically the Hopi, according to our present knowledge, belong to that great family called by Major Powell the Shoshonean, and by Brinton the Uto Aztekan, which extended from the middle of Idaho far into Mexico, and in which are included tribes so remotely different to-day in manners, customs and locality as the Bannock of Idaho, the Diggers and Mono of California, the Comanche of Oklahoma, and many tribes of New Mexico and Old Mexico.

The Pueblo of Oraibi

The town is arranged in irregular rows of terraced houses, rising, as a rule, to the height of three stories, and facing seven long, irregular, parallel streets. Here and there we come to



Hopi Girl and Baby.

enlarged spaces or plazas, in the center of which is generally found a raised rectangular structure rising about a foot above ground. From a squarish stone box-like projection on the summit of this structure extend, to a height of ten or fifteen feet, the two poles of a ladder. This ladder gives entrance to an underground chamber or kiva, which is at once a lounging-place for the men, a workroom and a temple. During times when no ceremonies are in progress we shall usually find these kivas occupied by men busily engaged in spinning.

The writer must confess that when he trod these streets for the first time six years ago. the sensation was not only indescribable, but utterly unlike that produced by a visit to any other Indian town either before or since. The multitudinous phases of life which one may readily see in even a hurried walk are not to be surpassed by those of any other primitive community in North America. Naked children at first flee from the stranger, but the

display of a stick of candy soon removes all fear and timidity, and he finds himself surrounded by a constantly increasing crowd of merry, rollicking, laughing children. What primitive little barbarians they are, with not a vestige of clothing, and with their hair standing out from their heads like a mass of sage brush exposed to the winds of the desert!

Turning toward the house terraces we shall see here a woman making pottery, there another engaged in the manufacture of a basket, and yonder a group of girls, shy and always modest, engaged in gossip or in fashioning their hair into those great whorls, which have come to be a well-known picture of Hopi life, symbolic of the squash blossom, the emblem of the virgin.

Houses

Not many ground floor rooms have doorways opening directly upon the streets; for the Oraibians still cling to their ancient manners and customs. To enter one of the houses, where we always may be sure of a welcome, we ascend a ladder to gain the roof of the first terrace. From this another ladder leads to the second terrace, and another to the third.

The first terrace is really a yard for the inhabitants of the houses; for here they not only bask and work in the sun, but from the beams of the roof of the second terrace they suspend corn and meat and other objects of food to dry. Practically everything that the Hopi eats is hung out and exposed to the weather at one time or other, on these terraces.

Descending by the ladder into the chamber below and groping our way about (for the narrow hole above does not admit much light) we find ourselves in a room which in former times was a place of refuge against foes, and is now largely used as a storeroom. In one corner is a great quantity of corn stacked up evenly and neatly, like cordwood; great earthenware vessels for water storage; large quantities of pumpkins, watermelons and dried peaches, stored away for winter use. One corner of the room is often occupied by a large rectangular stone about two and a half feet long and a foot and a half in width. two long sides resting upon upright stones fixed firmly in the floor, while the upper surface of the stone is black and highly polished. Underneath this stone is built a fire, the smoke of which is carried off by means of a hood which projects out from the walls above, the chimney being continued upward on the outside by means of large bottomless jars inverted one above the other. Kneeling before this stone we shall find the mother of the family applying to its heated surface, which she has first rubbed with pounded watermelon seeds, a thin bluish batter from a bowl. This requires but a moment's time for the baking, when it is lifted up and transferred to a rush mat placed on the floor at one side. She continues applying the batter and transferring the thin, waferlike bread upon the tray until a great pile has been heaped up. The sheets of piki, or paper bread, as it is called, are then made up into long rolls, ready for future

Again ascending the first terrace roof we pass directly through a primitive door, into a chamber corresponding in size to the one just left below, and which we may properly call the main or living room of the Hopi. The floor is of hard clay, and, as a rule, is carefully swept, neat and clean, while the four

walls of the chamber have been tinted with a light wash. From pegs in the wall here and there are suspended



Potters.



Pueblo of Walpi.



Hopi Women Filling Earthenware Jars at Water Holes, First Mesa.



A Hopi Maiden.

objects of clothing, children's toys, and a hundred and one odd things which go to make up the life of a barbarian people.

At one end of the room is a three or four compartment mealing bin, each compartment being occupied by a flattopped stone of granite, set at an angle. Behind this the Hopi woman spends on the average three out of every twenty-four hours grinding corn. Perhaps more than eighty per cent of all their food consists of different preparations of corn.

In little wall niches are stored earthenware vessels, when not required for use at the meals, or bowls heaped up with fresh ground corn meal, while thrust into the brush covering, over-

lying the rafters of the ceiling, are to be found spindles, U-shaped sticks used for fashioning the hair into whorls by the maidens, or into a knot at the back of the head by the men, bows and arrows used by the boys, and many small objects used by the Hopi in their religious life.

Dress

The dress of the women in their daily domestic life is practically uniform. Of the changes of fashion of her less fortunate sister beyond the limits of Tusayan she knows nothing. The dress and blanket and moccasins which served her grandparents in ages gene by and which they found to be suitable to their requirements, serve the Hopi woman of to-day equally well. The dress itself consists of a single piece of black woolen cloth beautifully woven and embellished with an upper and lower border of blue, the edges being green or blue bands of yarn. The conversion of this garment, which at first serves as a blanket, into a dress, is a simple process. Two opposite edges are brought together and are sewn throughout their length, except for a small space near one end, which gives an opening for one arm. The garment thus folded is then sewn about one-half its width

along one of the narrow ends, the remaining spaces giving passage for the head, the opposite or closed side of the garment passing just underneath the other arm.

The belt is also of wool, about three inches in width, and is blue and green in color and sufficiently long to be passed around the body three times. On certain occasions the Hopi woman puts on moccasins of white buckskin, the upper of which terminates in a long, broad band, which she winds about her lower leg until it reaches the knee, thus giving the feet the appearance of being encased in white top boots. In addition to the blanket, belt and moccasins which every Hopi woman owns, she usually possesses a smaller white blanket, with blue and red bands along two borders, which she wears on ceremonial occasions.

Each Hopi woman, on her marriage, is provided by her male relatives with certain white garments, consisting of two pure white robes of cotton and a broad white cotton belt with long knitted fringes.

After marriage the Hopi woman releases her hair from the great whorls worn as a maiden, and fashions it into two rolls, one on each side of the head, which she wraps with many turns of a long string made of her own hair. About the neck one usually finds many strands of shell or turquoise beads, or a necklace of silver, while in her ears she wears squarish blocks of wood, with a well-made turquoise mosaic.

Of the former daily costume of the men not much remains, the simple cotton loin-cloth serving every requirement through the greater part of the year. The men, as a rule, wear moccasins upon their feet, which they stain red or black, or which they color to meet the requirements of some special ceremony. Only a few specimens of the old, beautifully made, woven shirts of blue cotton, which the Hopi men formerly wore



A Hopi Mother with Baby in Basket-work Cradle.



Oraibi Girls Grinding Corn.

still survive, and their use to-day is largely ceremonial. Occasionally may be found a blanket such as the men probably wore in former times, but which to-day is but rarely manufactured, the men preferring to buy a less expensive blanket from the trader or from the Navaho.

We shall have seen large numbers of stone tools, such as axes, hammers, mortars, pestles, knives, grinding-stones, mealing-stones and rubbing-stones. The lesson which the presence of all these stone objects teaches is one which the archeologist is slow to learn; but, if we read aright, their presence and use by the Hopi in this twentieth century forces the conclusion that the place to study archeology is not in the scant remains of imperishable objects yielded by the mounds of the Mississippi valley, but among the people who still use these objects, as here in Oraibi, where we may determine to a certainty both the nature and use of such objects, learning of their manufacture and ultimate abandonment. Surely, with the art of pottery flourishing here, with many forms of basketry, with the manufacture of many kinds of cotton and woolen garments, with the use of wood for a wide variety of purposes, we could not say that Oraibi was in the stone age, but such, perhaps, would be the report of the archeologist were he to find it after it had been abandoned or destroyed by fire.

In the Fields and Orchards

Should our visit to Oraibi be at any other time of the year than in the winter, or during some great ceremony, we note the almost total absence of men from the village. It is now time to descend into the valleys below, in which the Hopi men spend several months of each year; for here are the cornfields, melon patches, orchards and flocks of sheep.

A Hopi cornfield is a priceless possession to the Hopi, but after having traversed the great cornfields of Kansas on the Unlimited, one can scarcely believe at first that the little patches scattered here and there along the dry washes



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Corn Carrier.

in the valleys are really cornfields. The stalks never rise more than four feet in height, and the hills average from ten to a hundred feet apart; but in the hill are often as many as ten stalks. The Hopi thoroughly understands, as did his forefathers, the conditions in these hard and desert valleys. Ridiculously small as the field seems to be, and small as the corn itself actually is, it has cost the Hopi

months of weary labor and patient watching.

Early in the spring, with his digging stick he sinks a hole deep into the earth, for the moisture is not to be found, in Arizona, near the surface. In the second place he must shelter his little field from the driving blasts of sand which sweep over the valleys in the early spring like a snow-storm in the north in the dead of winter, and this sand must be kept in check, otherwise his field would be buried; consequently along one or more sides of his field he must plant a wind-brake by thrusting into the ground a close hedge of sage brush, and it must be kept in repair until the corn can fight its own battle against the sand storm.

With the corn well sprouted and fairly out of the ground begin his days of never-ceasing vigilance; there is a crow in the immediate neighborhood for every grain which he has planted, and when the crows are not in sight, some stray flock of sheep or a burro puts in its appearance. But centuries of watch-

ing have taught the Hopi a lesson, and for the crows he erects wonderful scare-crows, while for his own greater comfort he builds a commodious field shelter in which he passes many hours of the hot summer days, his time being spent in the spinning of a tale to some friend or in the spinning

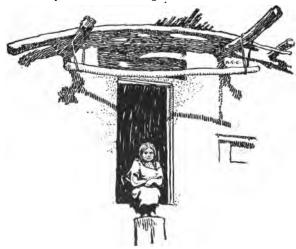


Dress Weaving.

of yarn to be used later in the year in the manufacture of garments. Likewise the Hopi must protect his melon patches and even his young peach trees from the ravages of the sand-storms, and from the depredations of the sheep of his own people or those of the Navaho.

When not otherwise engaged the Hopi man takes his rude axe and burro and goes to the distant mesa north of Oraibi, where he brings in great bundles of fagots of piñon and cedar. As he goes up and down the trail to the village, he passes the women of his family as they trudge back and forth from the lofty mesa to the distant spring at its foot, in their daily quest for water, or as they seek clay in the pits, to be used either in the manufacture of pottery or in the building of houses, for the Hopi woman is the house-builder and the house-owner.

Can any town in the world, with a similar number of people, produce a greater number of sober, industrious, patient toilers than are to be found on the summit of this West Mesa? Transport the other six Hopi villages, abolish the Government agent over in Keam's Canyon, remove the trader's post at the foot of the mesa, and the home of the missionary, take away the Navaho, and let all the remainder of America be laid waste, and the people of Oraibi could, and probably would, continue their daily life as they do to-day, with a supreme indifference to all other affairs than their own; for they not only produce, or can produce, everything which they require, but being able to sustain themselves in this absolutely independent manner, they are contented and beyond the needs of alms from the nation, the merchandise of the trader or the stern religion of the missionary, which will not guarantee rain.

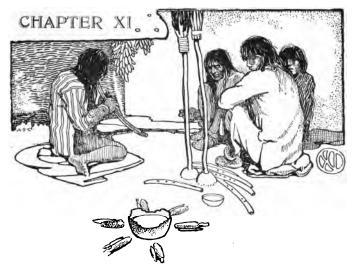




Interior of Hopi Kiva.



Eagle Burying Ground, Oraibi.



The Hopi at Worship

Kivas - Prayer Offerings - The Altar - Sand Mosaics - Shrines - Dances - After Death



HEN the Hopi are not at work they are worshiping in the kivas. The underlying element of this worship is to be found in the environment. Mother nature does not deal kindly with man in the desert. Look where you will, across the drifting sands of the plains, and the cry of man and beast is, "Water!" And so, to the gods of the rain clouds

does the Hopi address his prayer. His instruments of worship are so fashioned that his magic may surpass the magic of these gods, and compel them to loosen their stores full to overflowing. Take any one of the great Hopi ceremonies, analyze the paraphernalia worn by the men, dissect the various components of the altar or sand painting, examine the offerings made to the springs and those placed upon the shrines, and in everything and everywhere we see prayers for rain.

Should our journey be made in winter or spring, summer or autumn, and should we have a few days to spare, we are sure to encounter one or more of these great ceremonies, with its brilliant and public pageant at the close.



Antelope Altar in Kiva.

The Kiva

It has been said that the kiva is both clubhouse and temple. In its latter capacity let us again enter it, say a few days before the beginning of any ceremony. Descending the ladder, we find ourselves in an underground chamber averaging twenty feet long and twelve feet wide, with a roof consisting of a closely laid course of fine boughs resting upon small

rafters which in turn are supported by seven or eight beams which cross the kiva at intervals along its narrow sides. The ladder on which we have entered has its foot against a raised platform occupying about one-third of the kiva.

The remaining or excavated portion of the kiva is surrounded by a wall or banquette, along three of its sides, rising to the height of a foot or more. The floor is of rough, flat stones, loosely fitted together, their interspaces being occupied by smaller stones or tightly packed clay. The walls, roughly plastered with mud, together with the roof, are generally stained black with the smoke which rises from a hearth about two feet square near the end of the excavated portion, directly under the kiva hatchway. Under the smoke on the walls may be seen in some kivas, symbolic drawings, while on the rafters may often be found groups of four parallel white lines.

The raised portion of the kiva during the progress of a ceremony is for those priests who are not actively participating in the ceremony. The floor itself is reserved for priests actively engaged, who are generally seated either on the floor or on the banquette, spinning cotton for ceremonial uses or making bahos or prayer-sticks. The far end of this excavated portion is reserved for the altar, and in front of it is laid the dry sand picture. Beneath, and in the center of the region reserved for the altar, is found in nearly all kivas a small opening known as the sipapu, symbolic of that greater sipapu in the Marble Canyon of the Colorado, through which the Hopi are supposed to have entered this world.

Upon the opening of a ceremony the looms are taken down in the kivas and all other evidence of a work-a-day life disappears. Thrust into the mat covering the kiva entrance is to be seen the *natsi* or standard of the society which is about to begin below its ceremonial performance. The *natsi* announces to the inhabitants the presence of a ceremony, that during the following days no one not a member of the order is supposed to venture into the kiva without the priest's permission.

Prayer Offerings

Each day has its own special rites and appropriate duties. Certain days are generally devoted to making countless prayer offerings or bahos. On the mornings of such days priests hurry into the kiva, each one bearing under his arm a plume box containing eagle, turkey and other efficacious bird feathers. Some priests bring stone mortars, upon which to grind the decorative paints, also bunches of corn husks, small bags of sacred meal, little earthenware vessels of honey, pieces of sandstone and sprigs of certain water-loving plants.

Many are the kinds of bahos made by the Hopi, each having its appropriate name and function. One of the most common is known as a sakwa, or double green baho. Two sticks, averaging from three to five inches in length, are prepared, terminating at one end in a conical point. On one of these sticks is next cut a facet. This is to be the female baho, the other the male. Both are painted throughout their length, except the facet, with a coating of green, the paint used being made of crushed malachite and water. The facet is then painted brown, and upon it, arranged in the form of a triangle, are three dots representing a face. The two sticks are then bound together by cotton twine. The priest next takes up a bit of corn husk, which he forms into a packet, placing therein a pinch of sacred meal and a bit of honey. This, with a turkey feather and a sprig of Artemisia frigida, he attaches to the two sticks. Finally he adds a short

cotton string about three inches in length, to one end of which is attached an eagle breath-feather, the string and its feather being known separately as a nakwakwosi. The baho is now ready to be deposited in a basket tray which the priest prays over, and from a pipe filled with native tobacco, blows upon them four puffs of smoke. The tray is laid aside until the bahos are sent into the fields

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Oraibi Blue Flute Altar

or put in the niche of a rock or in a spring, or deposited upon a shrine, where they become messengers to gods.

The Altar

The erection of the altar is the lot of the chief priest and his assistants. For example, take the one erected during the performance which takes place every other year at Oraibi, given by the flute fraternity. The salient feature of this altar is the *tiponi* or palladium of the society.

The *tiponi* is of cylindrical shape, about ten inches in height, and is wrapped throughout its length with cotton thread; within is a concealed ear of corn, encircled by tall feathers of brilliant plumage. Although

the corn ear is generally present in the *tiponi*, when it is known as the mother, certain others contain within a polished stone celt.

Back of the tiponi and next to the banquet are two broad upright slabs, their upper extremities being connected by means of a transverse slab bearing numerous rain-cloud symbols. Between the two upright slabs stands a large wooden effigy representing Cotuknangwu, the "Heart of all the Sky God," an important personage in Hopi religion. By his side are many zigzag shaped sticks emblematic of lightning. In front of the altar is a medicine bowl upon which are terraced rain-cloud symbols. At the side of the medicine bowl is an aspergil with which the priest sprinkles holy water. Arranged around it are six ears of corn, there being on the north side à yellow ear, on the west a blue ear, on the south a red ear, and on the east a white ear. On the northeast is an ear of sweet corn emblematic of the above or zenith, and on the southwest a black or speckled ear, the emblem of the below or nadir. These colors are always used by the Hopi in connection with the six directions, and the medicine bowl, with the six colored ears, is often spoken of as the "six directions" altar.

At one side stands a small netted gourd, the so-called priest's jug, used as a receptacle in bringing water from a certain spring

which is used in the holy water. Then there is a basket tray containing sacred corn meal, typical of the sacrifice, which is sprinkled from time to time by certain priests. There is present also the bull roarer, or whizzer, the twirling of which produces a rumbling noise typical of thunder. Four little cup-shaped objects painted in the colors of the four directions are near by. Such cup-shaped affairs are survivals of the time when the will of the gods was determined by the guessing of the priests as to the location of a small wooden ball hidden under one of the cups. The whole altar forms a mute and eloquent appeal for copious rains.

Sand Mosaics

When candidates are admitted by initiatory rites, a dry sand painting or mosaic is generally laid on the floor of the kiva, in front of the altar. The mosaics of no two ceremonies are alike. We may take, as typical of this interesting phase of Hopi religion, the mosaic spread on the kiva floor during the great Powamu ceremony, held in the majority of Hopi villages during February. A level ground of reddish brown sand is first sprinkled thinly on the floor in a four-foot square. Upon this is laid, by means of sand, trickling through the thumb and forefinger, four straight bands, the ends of which terminate in a terraced rain-cloud symbol, from the points of which depend black symbols of turkey feather nakwakwosis. The bands are colored after the symbolism of the four directions, and collectively they are known as the "home" into which the candidate is welcomed during his initiation. Occupying the center of the square is a large circular squash blossom symbol, also repeated at each outside corner of the field. Scattered here and there are numerous small spots of many-colored sands which collectively typify the various Hopi food seeds. In front of the field are outlined four semi-circular rain clouds in black, from each one of which a turkey feather symbol also depends.

As a rule, initiation into a Hopi fraternity is not accompanied with any disagreeable features. The one great exception among the Hopi is when children are initiated into the Katcina cult. They are then held out at arms' length over a sand picture and severely flogged with yucca leaf whips in the hands of one of



Oraibi Drab Flute Altar.

two masked men. These rites also take place during February and are held in connection with the great Powamu ceremony.

Shrines

Referring to bahos or prayer offerings, let us observe one of the priests when about to make a deposit at that most beautiful Hopi shrine, the one situated at the base of Corn Rock, half way down the slope of the middle Mesa, near Mishongnovi. The majority of the bahos deposited here are symbols of corn ears. Taking the bahos in his hand the priest holds them in front of his face, while he offers a silent prayer, then reverently deposits them. He

takes the pinch of meal, upon which he breathes a prayer, and casts a portion of it upon the bahos and then a pinch to the north, to the west, to the south and to the east, to the above, and finally to the below; then the priest returns to the kiva.

As the ninth day of a great ceremony approaches, increased activity on the part of the villagers may be noted, and should we ascend the mesa sufficiently early, just before dawn, we shall hear the weird voice of the crier as he announces from a house roof that the dance is to take place in the plaza on that afternoon. During that and perhaps preceding nights the priests in their underground temples have been engaged in singing certain traditional sacred songs, about the altar, and have been uttering formal prayers such as their ancestors uttered hundreds of years ago; for both songs and prayers contain many strange archaic words no longer understood. Fortunate is the traveler who gains entrance to the kiva during these solemn rites.

With the first glow in the east the priests hasten to the shrine of the Sun God, with their offerings, the luminary himself being greeted with a prayer or with songs as he slowly emerges from behind the mesa in the far east. Later the priests repair to

their homes, and return to the kiva, bearing the ceremonial paraphernalia with which, early in the afternoon, they robe themselves in gorgeous array preparatory to the dance, which is given usually before the sun sets behind the San Francisco Peaks.

As the priests emerge from the kiva, where they wait in line until all have appeared, there is the hush of expectancy throughout the village, the inhabitants now line the terraces, house-tops and every available spot around the dance plaza, all being attired in their gayest and brightest costumes. In single file and with measured tread comes the line of priests. Entering the plaza they wheel about and begin a slow, short dance, the time of the step being accompanied by the shaking of rattles and by the singing of sacred songs. The dance is over all too soon, when the spectators return to their camps, and the priests to the kiva, where great quantities of food have been brought for them. Finally, in a great feast, they break the fast, which, on the part of the chief priests, has been maintained for many days.

After Death

No account of the worship of the Hopi would be complete without a notice of the ultimate fate of their bodies and souls after death. In common with all men, in whatsoever part of

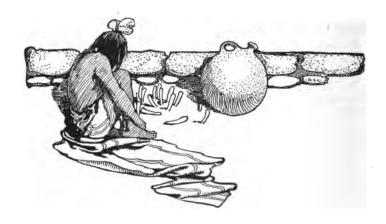
the world, the Hopi believes that he "shall not all die." And so, on the conclusion of life, the body is carefully prepared for burial. If it be an adult, it is at once removed to the burying ground, generally situated at the foot of the mesa, where it is placed in a shallow grave covered with earth. Just beneath the surface is deposited a baho, from which projects a long cotton string with an eagle breathfeather attached to its end, and which is laid in a long trench pointing west. Over the grave is then piled a rude heap of stones,

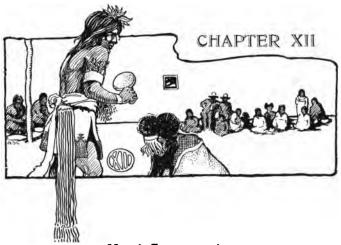


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prayers are said by the relatives of the deceased, and upon the graves sacred meal is sprinkled.

You ask the Hopi, "What then?" Strange, forbidding and harsh is his environment, and he has little time for speculative thought concerning the life beyond the grave; but he will tell you in serious tones that on the fourth day after death, the soul departs from the body, mounts the soul of the long cotton string, or "road marker," and travels on it toward the west; for it indicates the way to Maski, the Skeleton House, at the bottom of the Grand Canyon. Such is not the fate of the souls of children, which return to their mothers and are born anew; hence the bodies of children are deposited with due ceremony in clefts in the rocks, usually in the immediate vicinity of the village, the entrance to the cleft being sealed with small stones.





Hopi Ceremonies

Autumnal Ceremonies — Marau, Oöqol and Lagon — New Year's Dance —
New Fire Ceremony — Winter Rites — Powamu — Katcina Dances



E must rest content with a brief statement of the time and general character of each of the nine-day ceremonies, paying especial attention to those which are of greatest interest to the visitor, noting also those minor or one-day ceremonies during the early months of the year, known as Katcina dances. We may consider, in order, the women's ceremonies given

during the autumn; the New Year's ceremony; the winter ceremonies; the great Powamu ceremony of February; Katcina and other one-day ceremonies; and finally, the Farewell or Niman ceremony in July. The great August ceremonies, given by the Flute, Antelope and Snake Societies, will be treated in the next chapter.

Autumn Ceremonies

During August an elaborate ceremony is held by a fraternity in each Hopi village, the fundamental object of which is to compel the rain clouds to release their stores of water, that the washes may be filled. The long drought of summer thus being broken, the growth of the corn now becomes steady and may be expected to continue uninterrupted until October. Additional rains, and



Lagon Priests.

especially warm winds, are now required to ripen the ear, and so we find in each village one or more nine-day ceremonies for this purpose. There are three of these autumn ceremonies, and curiously they are all performed by women; they are the Marau, Oōqol and Lagon.

THE MARAU.—The Marau ceremony is performed at Oraibi in odd years, during September. The secret rites are held in the Marau kiva, the exclusive property of a fraternity known as the Mamzroutu. The leaders in the nine-day ceremony are a chief Marau priest and priestess, a leader of the dance, and certain women dressed as men and known as takas.

On the final day of the performance, the women, dressed in beautiful ceremonial robes, file out of the kiva into the plaza, where they form a large circle. Each of the performers carries in her hands a painted flat slab of wood on which are depicted

rain-cloud and other symbols, and an ear of maize in colors. These are Marau bahos and are waved up and down to the time of the singing in chorus. Two of the women carry bows and arrows and small corn husk packets. As they advance toward the circle the packets are tossed into the air and are shot at with the arrows. This is said to symbolize the striking of the lightning in the cornfield, which, by the Hopi, is regarded as the acme of fertilization. This ceremony concluded, small balls of sweet corn meal and water are cast among the spectators by whom they are eagerly sought.

The Oögöl.—According to tradition, this ceremony was brought to Oraibi from Awatobi, and it is claimed that a majority of the altar pieces were brought from this village, which was destroyed over two hundred years ago. The ceremony is performed by a woman's fraternity known as Oögöllu, and is held on odd years in the village of Oraibi, in September.

The altar of this fraternity is very elaborate and its ceremony is one of the most complicated in the Hopi calendar.

The dance or public performance of this society is in many respects similar to the one which takes place during the Lagon ceremony. While the women are performing in the circle with basket trays, two women or *manas* appear, gorgeously attired, each wearing an elaborate and picturesque head dress of parrot feathers. In one hand they bear a beautiful netted wheel and in the other a dart. As they approach the circle, they roll the wheels upon the ground and attempt to pierce the central opening of the wheel with their feathered darts. This act is said to typify the acme of fertilization. We have here an early and sacred form of a game, seen in its degenerate form in the ring and javelin game or in other similar forms as played by practically all of the Indians of the North American Continent.

LAGON.—This is also a nine-days' ceremony, conducted by a woman's order known as the Lalakonti. It is held in September in even years at Oraibi, and thus alternates with the Marau and Oöqöl ceremonies. There are many rites connected with each successive day's performance. Thus, as the women begin to gather in the kiva in increasing numbers from day to day, bahos are made in profusion, which are deposited on the shrines by girls.

After the ceremonial foot race which forms such an interesting and intrinsic part of all Hopi ceremonies, two women, dressed in elaborate ceremonial costume, with coronets and brilliantly colored feathers on their heads, play a game with small rings and darts, and cast basket trays to the spectators. At the conclusion of this performance the women gather in a large circle in the plaza, where they perform a dance accompanied by singing and the waving of basket trays in their hands. This and the Oöqöl are often spoken of as basket dances.

New Year Ceremony

The exact method which the Hopi employ in reckoning their

calendar system is not yet thoroughly understood. They perform, however, during September, a ceremony, Yasanglawu, which, according to the Hopi, ushers in the new year. This ceremony lasts only one day and one night. It is performed in the kiva by a male fraternity known as the Kwakwantu. The principal participants are a chief



Women's Dance, Oraibi,



The Walpi Lagon Ceremony.

priest, who is a member of the Kwan clan, an assistant chief priest and singers. During the celebration an altar is erected, but no account of it or of the ceremony itself has ever been printed.

New Fire Ceremony

This is one of the most important of all Hopi ceremonials. Its celebration, in October, requires the participation of all the male fraternities of each village. All the village kivas furnish their quota of dancers, who appear in the public performance in the plaza, each group furnishing also certain men who act as drummers. One of the most interesting features of this extremely complicated ceremony is the creation of new fire by means of the ancient fire drill. Entrance to the village itself during these rites is strictly forbidden, the trails being closed by the sprinkling of meal across them. An additional interesting feature is the presence of a masked personage representing a Soyal Katcina, who dances in different parts of the village.

Winter Ceremonies

THE SOYAL.—An important and extremely complicated ceremony is held each year in the five chief Hopi villages, generally

during the second half of December. The leaders are the Soyal priest, assistants, a war chief or Pöokon, a Hawk man, and many other personages. The sacred rites are held at Oraibi in the Pongovi or Circle kiva, but, as all fraternities of the villages are supposed to coöperate, many bahos or prayer-sticks are made in the other kivas. The secret performances, held late at night on the fourth and fifth days, are very interesting. By this time the altar has been erected at the rear end of the kiva. After the singing of many traditional songs, and after a large number of complicated rites, a priest enters, imitating the hawk or the thunderbird, and there then ensues a conflict between this personage and a man dressed as a war god, the conflict probably representing a contest between certain cosmic forces, but yet imperfectly understood.

During the final performance of the ninth evening there enters the kiva a man dressed in beautiful ceremonial garments, wearing over his forehead a large four-pointed star. In his hands he carries a large sun symbol supported on the end of a wooden shaft. During the singing by the priests seated around the altar, this Star god dances with an exceedingly rapid movement from one side to the other, twirling the sun symbol rapidly in front, always keeping time with his body and arms. This seems to represent the climax of the ceremony, which not only celebrates the winter solstice, but which has as its special object the compulsion of the sun to desist in its southern flight. During the performance of the Star god, the War god stands by his side and asperges him with holy water from the medicine bowl.

On the eighth day two Mastop Katcinas appear at the kiva, where they perform a number of curious antics, and on the

ninth day occurs the dance in the plaza. The dance is performed by men wearing masks repesenting the Qöqökölum Katcinas.

During January are held winter performances of all summer ceremonies. These are naturally abbreviated, although, as a rule, they occupy nine days.



The Walpi Lagon Altar.

Powamu Ceremony

This great nine-days' ceremony, preceded by the Powalawu, is the most complicated and instructive in the Hopi ceremonial calendar year. Compared with the succession of startling pageants and spectacular performances then enacted, the widely heralded snake dance is of secondary importance. In no part of the world could one see in nine days such a wealth of ceremony, such a pantheon of gods represented by men masked and otherwise appropriately costumed, such elaborate altars and beautiful sand mosaics, or speeches and songs so archaic and ancient.

The preliminary one-day ceremony of Powalawu is held late in January. A beautiful sand picture, representing the sun as its central feature, is erected on the floor of the kiva. Among the objects scattered around may be mentioned a corn husk containing sacred meal and a dead mouse, which is deposited on an ant hill as a prayer that the ants satiate themselves on the mouse and forbear to molest the crops.

On the final and public performance a large number of Katcinas appear, the spectacle thus being one of unusual brilliancy and interest. During the feast, which falls on the evening of the ninth day, are eaten young shoots of beans, large quantities of which have been ceremonially planted just before the beginning of the ceremony. The Powamu seems to relate to the consecration of the fields for the approaching planting season.



The Hemis Katcina Dance, Oraibi.

Katcinas

The word Katcina is applied by the Hopi to supernatural beings, to masked men who impersonate these deities, to any ceremonial dance in which these masked figures appear, to the masks themselves, or to small wooden statuettes carved in imitation of masked dancers and known as tihus or dolls. Inasmuch as these brilliantly colored little images have been for many years eagerly sought by the curio-loving world, it may be said that these dolls are not idols, nor are they worshiped. They are made by the men and are given to little girls by the women, either during the close of one of the great winter ceremonies or at the close of the Niman or farewell ceremony in July. With them the



Katcina Dancers.

Hopi mothers make more vivid this particular feature of their religion.

During March, April, May and June, there are no great or nine-day ceremonies among the Hopi. This does not mean that the Hopi has discontinued his devotions, or that he is not making appeals to his favorite gods for abundant rains. But the ceremonies which are now given are abbreviated, and are performed by masked men known as Katcinas. There is a large number of these dances during the spring months, each with its own distinctive mask and with its proper mission to perform. On account of the multitude and variety, however, notice must be confined to two of the better known.

Katcina Dances

The performance of the Hemis Katcina is a most striking dance. At a certain time in the spring various members of this society meet in a certain house and engage in preliminary smoking; in fact, preparations are in progress for three days. On the appointed day a line of thirty or forty may be seen entering the plaza, about three-quarters of the number wearing gaily colored Katcina kilts and sashes, with their bodies painted black, and wearing on their heads a great mask which entirely covers the face, and which bears upon its summit a large tablet



Hemis Katcina Dance, Oraibi Manas Playing on Notched Sticks in Front of Dancers.

in the form of a terraced rain cloud. The remainder of the line of dancers are men dressed as women and known as Hemis Katcina manas. Each one of the manas wears on his face a small mask, fringed with yellow horsehair.

Entering the plaza, a song is begun by the leader, who is never

masked, and the whole line begin singing and dancing, keeping time with a rattle and pine branch. At intervals the manas kneel in front of the Katcinas on old rabbit-skin robes, where they now draw a deer scapula across a notched stick, one end of which rests on a large gourd, acting as a resonator.

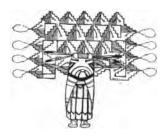
As to the meaning of this dance we have only to examine the mask itself. The tablet is a rain cloud; on it are additional rain-cloud symbols, symbols of squash blossoms, etc. A visor on the mask bears additional rain clouds, semi-circular in form, and drops of falling rain, while on the body of the mask are tadpoles, frogs and squash blossom symbols, and at the back is a lightning symbol. Even the body itself, painted black with corn smut, is an invitation for the rain to come and wash it off.

The Anga Katcina is a well known Katcina dance, one variety being known as the Sia Anga, so termed because borrowed from the Sia or Zuñi, and illustrating how certain phases of religion and ceremonies are borrowed by one tribe from another. In this dance the body of the dancer is painted red. There are other small variations in the costuming of the dancers, but, as a rule, all the masked dancers wear the ceremonial kilt, sash, the woman's belt, a fox skin behind, Katcina moccasins, and arm and leg bands.

In addition to the Katcina dances of these spring months are many other dances, some religious or even social in their nature. Such is the so-called Buffalo Dance, during which head dresses imitating the heads of buffalo are worn; or the so-called Paiute Dance, when neither mask nor head-dress is

worn, but the dancers costume themselves as nearly as possible in the garb of the Paiutes and dance according to the fashion they have learned from the Paiutes.

The NIMAN KATCINA, of nine days' duration, is annually held in five Hopi villages the latter half of August. It is performed by men of the Powamu order and in the same kiva where we saw erected the elaborate Powamu altar. This altar, with the exception of the sand mosaic, the lightning frames and the slabs, is the altar of the Niman Fraternity, thus leading to the belief that there is an intimate connection between the two cere-During the final performance a large variety of Katcinas appear, among them being several of those more sacred Katcinas seen only on rare occasions. The symbolic meaning of the ceremony is the return of those minor deities which have thronged the streets of Oraibi and other villages in the form of masked personages for the past four months. They now return to their proper underworld. As the kivas were opened to the Katcinas in the Soyal ceremony, so now they are sealed up, and the Katcina season is ended.

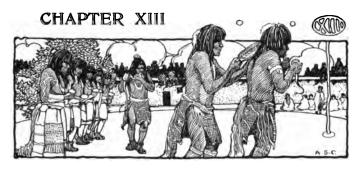




Snake Priests Chanting before Kisi, Oraibi.



Ceremony of Flute Priests, Outside Village, Oraibi.



Flute, Antelope and Snake Ceremonies

Blue Flute, Antelope and Snake Dances Described in Detail



HEN the golden sun of July has passed into the blistering dog-days' sun of August and the people of the East are longing for rain, the Hopi priests are performing great ceremonies and making mighty medicine, the magic of which shall overpower that of the gods of the four world-quarters, the clouds and the lightning, in order that copious rains may descend and

rescue the needed corn crop. Fortunate is he who has beheld any of the great winter ceremonies, but more fortunate is he who, fleeing from stifling city heat during August, has the courage to make the desert journey, and who can afford to spend a few days away from civilization in a tent at the foot of one of the mesas.

The Hopi villages, which during the greater part of the year are left in almost absolute seclusion, now begin to change; for the tourist and the scientist throng the streets of these quaint towns, all eager to gain admission to the kiva, and more eager on the final day to obtain an advantageous point of view on one of the terraces, where they may snap their kodaks at a line of picturesquely dressed dancers and carry away the picture of a naked priest with a rattlesnake in his mouth. The summer ceremonials of the Hopi are growing more and more popular, as the world at large gradually realizes that the trip to Hopiland not only may be made without discomfort, but that the journey itself is an unqualified delight.



An Oraibi Flute Dancer.

In five Hopi villages every year, two fraternities coöperate during August in the presentation of a nine days' ceremony. They are the Blue and Drab Flute and the Antelope and Snake. In even years (1904-1906, etc.) the Antelope and Snake fraternities combine and enact their rites in the villages of Oraibi, Shumopovi and Shipaulovi. In the villages of Mishongnovi and Walpi may be witnessed in the same year, the combined ceremonies of the Blue and Drab Flute fraternities. In odd years (1903-1905, etc.) in Oraibi, Shumopovi and Shipaulovi are held the Flute ceremonies, and in Mishongnovi and Walpi the Snake-Antelope ceremonies. As the final day's performances do not coincide, one may arrange to witness several of them.

Naturally the goal of the majority of those who make the journey to Hopiland in August is the Snake ceremony, which, owing to its spectacular performance on the ninth day, has become world famous. The celebrations of the Flute Society, however, are certainly not less interesting, and in many ways are more picturesque. The date of the final performance of any one of these ceremonies is always known in the village at least sixteen days in advance. The officials of the Santa Fe are usually able to give due notice of it from ten to fifteen days in advance, in order that those whose time is limited may so arrange their journey that the public performances of two or three of the ceremonies may be witnessed without the expenditure of more than a week's time away from the railroad.

Flute Ceremony

In each of five villages there are two Flute organizations, one known as the Cakwalenya, or Blue Flute, the other as the Macilenya, or Drab Flute. The rites of these two societies have much in common, and a brief description of one will suffice for both.

The secret rites of these societies are not held in a kiva, but in a chamber of the house of a leading member. Here the altar is erected, bahos are made and sacred traditional songs are sung. On the ninth day there is a public performance at a spring near the foot of the mesa. Early in the ceremony the six directions' altar, with its accompanying charm liquid, is erected, bahos are made, consecrated and deposited, the altar is put up, and the final early morning races and the public

performances are held at the spring. The last three events are of special interest.

For the altar, we may again refer to that of the Blue Flute erected at Oraibi. We may now note in greater detail that the reredos of the altar forms a terraced rain-cloud symbol, while painted thereon are semi-circular rain clouds, lightning and The great central image or Sky god bears on the sides of its body tablets, which may be likened to broad wings, each of which bears symbols of rain clouds and falling rain. At the side are effigies—one male, the other female—the cultus heroes of the Flute Society. The tiponi stands on a white semicircular rain cloud of meal, surrounded by a terraced cloud symbol made up like a mosaic of kernels of blue and yellow On each side of this symbol are many small wooden birds, rudely carved. These birds are present in all Flute altars of Tusayan. There remains, finally, the bull-roarer or whizzer, the honey pot, and the great cloud-blowing pipe, occupying positions on the left hand of the altar.

At sunrise of the ninth day occurs a spectacular footrace of

naked men. They start from a point far out in the plain and run at a breakneck speed to the village in a grand struggle to obtain the reward of duly consecrated ceremonial objects which, when deposited in the owner's field, will give the winner special success in his crops. comes the slow procession of the priests to the springs, where, around a hastily improvised altar, rites are enacted, songs are sung, accompanied by music of large flutes, each of which bears on its end a half of a gourd.



Flute Priests at Spring, Oraibi Ceremony.



Flute Priests at Toreva Spring.

with symbolic paintings of the world quarters. These ceremonies about the springs are probably not surpassed in picturesqueness and beauty. The return of the priests to the village is announced by the village crier.

Analysis of these Flute ceremonies, as of other Hopi ceremonies, shows them to be elaborate pray-

ers for rain, that there may be water in the springs, which at this time of the year are likely to be at very low ebb.

Antelope-Snake Ceremonies

Comparatively few people, even of those who are acquainted from personal experience with the wonders and fascinations of the Southwest, have witnessed these strange rites. Many who have written about them did so from a desire to be sensational; as a consequence, many accounts are extant which give a false impression of these solemn, weird rites, so that at least an outline of the performance must be given here. For our brief description we may consider the combined performance given at Mishongnovi.

Announcement.—According to the ancient custom, four days after the close of the final performance of the Niman celebration in the neighboring village of Shipaulovi, the chief priests of the Antelope and Snake fraternities at Mishongnovi assemble in a room in the home of the religious crier of the village, where they manufacture bahos and engage in fraternal smoking. On the following morning this crier at sunrise announces from the housetop the time of the ceremony. Then it is that couriers are hastily despatched to the railroad, where the news of the date of the ceremony is wired for the benefit of those desiring to make the journey.

FIRST DAY.—On the ninth day following this announcement one will see the Antelope and Snake priests repairing to their respective kivas, where, before descending, they thrust into the mat-cover of the kiva hatchway a small, wooden object, sharpened at one end and having fastened to it two upright eagle feathers. This is the first natsi, standard, that announces to the world at large that ceremonies are to begin in the kiva below. Apart from the manufacture by the priests of nakwakwosis in the kiva, little else of a ceremonial nature occurs on this day; for the priests are all busy in the fields, where the withering corn requires their presence.

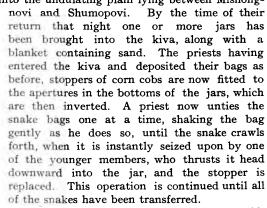
SECOND DAY.—Nothing of importance takes place in the Antelope kiva on this day. From the Snake kiva may be seen to emerge, at about ten in the morning, three or more priests, naked except for the loin cloth, each bearing on his back a bundle of food, and holding in one hand a snake whip similar to the natsi, and a bag of meal; in the other hand he bears a rude digging stick. This is the beginning of the ceremonial hunt, which, on this day, is to the north. Few white men have followed these processions to the fields, owing to the Snake priests' objections to spectators. Should we be so fortunate, however, as to gain the consent of the priests to follow the line, we shall see them pass rapidly, in single file, down into the little gap which separates Mishongnovi and Shipaulovi, then up the trail toward the summit of the mesa to the north, halting on the way at a shrine, where, after prayers, nakwakwosis are deposited, when they continue until well upon the summit of the mesa.

The hunt now begins in earnest. The men scatter, looking for snake tracks in the soft sand, and beating the sage brush here and there to arouse some sleeping reptile. Finally one has espied a rattlesnake coiled up at rest under a sage brush. He halts, casts a pinch of sacred meal from the little bag which he carries upon the reptile, and addresses a short prayer to it. He stoops over it, slowly waves his whip back and forth in the reptile's face, whereupon it begins uncoiling, when he swoops down upon it like a hawk and deposits the snake in a small buckskin bag. Perhaps another one has followed the track of a snake into a hole, whereupon he begins digging rapidly downward, thrusting into the hole his naked arm to discover the

direction of the hole. After digging perhaps two or three feet beneath the surface, the end is reached, the performance already described is repeated, and the snake deposited in the bag.

Thus the hunt continues, the men restlessly, rapidly and silently passing to and fro. At noon they come together at some appointed spring, where, after their usual deposit of nakwakwosis, they partake of food, but not until toward sundown do they wend their way back to the kiva. Once inside the sacred chamber, the bags containing the snakes are deposited side by side to the east of the old bear skin which contains ceremonial paraphernalia—snake whips and snake bags, to be used by the increasing number of priests who will take their places in constantly increasing numbers on the succeeding mornings. The priests then repair to their houses, return with food, and remain in the kiva, where they sleep during the night.

THIRD DAY.—On this morning nakwakwosis are again made and consecrated in the Antelope kiva, and are carried to the Snake kiva by the Snake priest, who now makes in turn a nakwakwosis for each of the members present for the hunt of this day, which is to the west. Again the line files out of the kiva and on into the undulating plain lying between Mishong-



FOURTH DAY.—The hunt on this day is to the south, and on the fifth day to the east, which concludes the ceremonial circuit. Should the priest

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not have been fully successful during these days, the hunt is continued throughout the remaining days of the ceremony up to the ninth; but on the days following the fifth no regard is paid to the points of the compass. As the number of snakes continues to increase additional jars are provided, until, by the evening of the eighth day, there are perhaps from sixty to eighty snakes present, from one-third to one-half of them being rattlesnakes, the others racers, whip and bull snakes.

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FIFTH DAY.—While the Snake priests are engaged in their last ceremonial hunt to the east the Antelope priests are erecting an altar in the Antelope kiva. First, sand of many colors has been brought into the kiva. A member takes a native basket tray and sifts upon the main floor a sand field approximating five feet square. Upon the edge of this are outlined four bands. On the inner space are sketched four rows of semicircles, a zigzag line depending from each one down into the main field. Two or more of the priests now begin applying the colored sand. First the outer square is filled in with yellow, symbolic of the north; then another band is filled in with green, symbolic of the west, then the red band of the south, and finally, the white of the east. In the meantime other priests have been filling in with these four colors the rain-cloud symbols. zigzags are then filled in and converted into lightning symbols. The two tiponis of the society are now placed in their proper positions at the extreme corners of the mosaic and the crooks and other accompanying objects are added, when the altar is completed. Bahos are now being made in rapidly increasing numbers.

Constant are the visits of the Snake priest, both morning and evening, to this Antelope kiva, where he engages in fraternal smoking with its high priest, bearing back with him each day to his own kiva certain prayer offerings.

Sixth Day.—Very early on the morning of the sixth day, just as the morning star appears, the Snake priest, accompanied by a young man, enters the kiva, where we shall find the priests beginning to assume their accustomed positions about the altar. In the meantime the Antelope priest has left the kiva and returns with a young maid. These two people are now properly attired in beautiful ceremonial costumes and are at once led



A Snake Priest.

to the rear of the altar, where, in the hands of the maid, who personates the Antelope maid of the great myth of this fraternity, is placed an earthenware vessel which contains stalks of growing corn and vines of melons. Upon the arm of the Snake youth is laid one of the *tiponis*, while into his other hand is given a rattlesnake, brought by the Snake priest from the Snake kiva. The two chief priests then assume their positions of honor in the semi-circle of priests about the altar, one bearing in his hands a snake whip, each of the other priests providing themselves with one of the altar crooks, while another priest takes from the medicine bowl the aspergil.

We are now to witness a ceremony and to listen to the singing of songs of great antiquity. One song after another is sung, the asperger sprinkling holy water upon the sand mosaic from time to time until the seventh song is reached, whereupon the chief Antelope priest retires to the side of the hearth, where he lights an ancient time-stained cloud-blower filled with native tobacco. As a new song is begun he passes to the back of the altar and as the priests sing their invocations to the yellow clouds of the north, to the green clouds of the west, to the red clouds of the south, and to the white clouds of the east, he forces from the smaller end of this pipe great clouds of smoke upon these colored clouds, as they are named, and invokes one after the other. At the termination of the eighth song the youth and maid are relieved of the objects which they have been holding and the ceremony is at an end.

SEVENTH DAY.—This performance is repeated in practically the same manner at the early morning of this day. And here, last year, a strange thing happened; for no sooner had the priests sung their traditional song to the clouds of the four world-quarters than rain began to patter heavily upon the roof of the kiva. So great was the emotion of certain of the priests at the conclusion of the ceremony that they burst into violent sobbing in their joy and thanksgiving.

Eighth Day.—Again this ceremony is repeated on this morning; but now comes an interesting variation. While the priests have begun the singing of the traditional songs, two of the Snake priests have arrayed themselves in the habiliaments of the War god. They provide themselves with a bull-roarer and a curious frame or lightning-shooter and leave the kiva.

Upon the hatchway they twirl the bull-roarer and shoot the frame to the four world-quarters and enter the Antelope kiva. During the singing of the seventh song they repeat this performance at the four corners of the altar.

While it is still dark outside the kiva the jangling of bells are heard as the young men of the village begin to make their way far into the plain below, eager for the first ceremonial or Antelope race. The warriors depart from the kiva, accompanied by an Antelope priest, and the three make their way down the side of the mesa, out into the field below, about two miles from the village. Here the Antelope priest deposits



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Antelope Circuit, Oraibi.

certain bahos in a little shrine. In front of the shrine he draws with sacred corn meal upon the sand, emblems of clouds and of falling rain. He then returns along the trail toward the village for a few yards and makes another set of these symbols, and so on until he has made four. In the meantime the young men of the village are ready in line back of the first cloud symbol, awaiting the signal for the race. At the conclusion of the drawing of the fourth cloud symbol by the Antelope priest the two warriors, twirling their bull-roarers, begin to advance toward the Antelope priest from the position which they have maintained by the side of the first symbol. Their arrival is the signal for the racers to start. And what a race it is! The spectacle is glorious as this line of from forty to sixty men rush on toward

the village, each exerting every ounce of his strength to gain the coveted prize. On and on they come, nearer and nearer the mesa, the tinkling of the bells at their knees keeping up a merry jingle as they are urged to put forth greater endeavors by their friends stationed at the foot of the mesa. On they come, the line now extending out over a long distance as the less fleet are gradually left behind and the race is left, perhaps, to three or four, who continue their way up the winding, precipitous trail, on toward the lofty summit of the mesa, the perspiration fairly dripping from their bodies. As the winner of the race appears upon the summit he continues his course to the roof of the kiva, where he sits down and patiently awaits his reward.

In the meantime, the two warriors and the Antelope priest have gained the summit of the mesa, where the latter makes upon the trail a cloud symbol and deposits prayer offerings, while the warriors again twirl their bull-roarers and shoot their lightning frames. The latter then repair to the Snake kiva, where they disrobe, while the Antelope priest at once proceeds to his own kiva, where he receives from the chief priest a small ring and a netted gourd into which has been placed holy water and consecrated smoke. These he now takes outside to the awaiting winner, who departs to deposit them in his fields, and the first public performance is at an end.

While the contestants in the race were departing for the field below, large numbers of naked boys and girls, fantastically dressed and painted, have gathered on the mesa east of the trail, the boys in one group, the girls in another near by. As the winner of the race makes his appearance at this point the girls, with a loud shout, run after the boys and there ensues a merry and picturesque scramble on their part to wrest from the boys the corn stalks, which the girls bear in triumph through the streets to their homes in the village.

The Snake priests not otherwise engaged during this day may be found in their kiva. Toward noon a heavily laden burro may be seen passing through the streets of the village, driven by one of the priests and bearing upon his back many cottonwood boughs. These the Snake priests now fashion into a bower or kisi.

In the Antelope kiva the manufacture of bahos has been continued, but toward the middle of the afternoon, in both kivas.

the priests begin to costume themselves for the public performance, which is to take place toward sundown. At the appointed hour the Antelope priests, led by their chief, appear, and proceed to the head of the plaza, each man bearing in his hand an Antelope rattle and all gaily costumed in ceremonial kilts and sashes, with dependent fox skins behind and the body appropriately painted. Soon the Snake priests appear. They also, with measured step, proceed toward the plaza.

As the Antelope priests enter the plaza they turn toward the right, near the walls of the houses, and make a complete circuit of the plaza four times, each circuit growing smaller in diameter and each priest sprinkling meal upon the two shrines, which occupy a position near the center of the plaza, and stamping violently with his left foot upon the plank which is set in the ground in front of the kisi, with a hole in its center. This hole. like those in the kivas, is symbolic of the sipapu, the entrance to the under world. As the Antelope band conclude their fourth circuit they line up in front of the kisi, facing north. The Snake men now repeat this performance, and at the conclusion of the fourth circuit, line up facing the Antelope priests. lines now begin singing one of the traditional sacred songs, the time of the singing being accompanied by the shaking of the rattles in the hands of the Antelope men, and by the waving of the snake whips in the hands of the Snake men. As one song after another is sung, the movement of the dancers changes; now it is slow, backward and forward, now it is a gradual swaying of the bodies of the priests, each locking arm with his neighbor. After this performance has been continued for some time, one of the Antelope men and one of the Snake men step forward

and go to the front of the kisi, where, stooping over, they obtain

a corn-stalk packet, which had been previously constructed in the kiva. This the Antelope man now places in his mouth, while the Snake man takes his place outside and places his right arm over the left shoulder of the Antelope priest. The singing of songs continues and the two men dance up and down the lines. At the conclusion of the performance the two societies return to their kivas, after having made the circuit of the plaza as before.



NINTH DAY.—On this morning again occurs the singing of the traditional songs, the performance of the warriors and the race from the plain below, which, on this day, is termed the Snake race. Throughout the day the Antelope men are, as usual, engaged in the manufacture of bahos. Toward noon there seems to hover over the entire village a solemn and mysterious awe, which even extends to the white spectators, whose number has greatly increased. Fortunate indeed is he who now has the privilege of entering the Snake kiva; for the time has come for the performance of the rite which is most zealously guarded by the Snake priests.

A large bowl is brought into the Snake kiva, and in it holy water is prepared. Sand is brought and spread over an area of the floor, perhaps ten feet long by two feet wide. This area is surrounded by large flat stones used by the priests during ordinary occasions as loom supports. Facing the wall and surrounding this narrow field of sand, the priests take their places, sitting on the stones.

In the center and standing behind the line is another priest, costumed as the War god. In front of the chief priest is placed the bowl of holy water. Two or three of the priests proceed to the corner of the kiva, where the snake jars are kept, which they pick up one by one, and gather the snakes up and thrust them into the canvas sacks which they carry to the Snake priests. The most solemn moment of the entire performance has arrived. Beginning a low chanting song, the priest reaches his hand into one of the bags and draws forth as many snakes as he possibly can. The song grows louder; the shaking of the



Priest Bearing Ceremonial Paraphernalia into Kiva.

snake whips in the hands of the priests is increased in violence as the chief plunges the wriggling mass of reptiles into the basin. Drawing them out, he hurls them violently upon the sand field, where they begin to crawl to and fro, their course being directed by the priests surrounding the field with their snake whips. The performance continues until the last of the snakes has been washed. The war priest then takes up the

bowl, leaves the kiva, makes a circuit of the village, visiting each of the four trails leading from the village, beginning of course with the north, and pours in each place a portion of the water, whereupon he returns to the kiva.

The older priests now continue the preparation and repairing of their costumes, one finishing a pair of moccasins, another painting his kilt, and so on. In the



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Face View, Snake Priests, Oraibi.

meantime the snakes are left on this sand field and are herded by barefoot, naked boys from seven to twelve years of age, who, sitting on the stones or upon the sand, play with the snakes, permitting them to crawl under, around and over them, handling them with as little apprehension of danger as boys playing with shells and sand on the seashore. Actually, as one sits by and watches this performance, fascinated and spellbound, the minutes lengthening into hours, he soon loses all realization of any sense of fear. He forgets that these little naked boys are actually playing with twenty or thirty rattlesnakes, to say nothing of other snakes, with no more feeling of fear than they would play with melon vines in the field.

As the sun begins to sink behind the San Francisco Peaks the priests of both kivas have concluded their preparation for the final performance. The costuming and painting occupied perhaps an hour. The men of both fraternities took immense pride in their make-up, assisting each other, and generously sharing a small piece of looking-glass which was in constant demand. The sight behind the scenes is amusing at times, and gives one a good idea of the humanness of the Hopi. The snakes are gathered into bags and are carried to the plaza by one of the Snake men, who secretes himself with them inside the kisi.

The hour for the dance has arrived, the village is thronged with people. Every available foot of space is occupied, not only around the walls of the plaza, but to the summit of the terraces surrounding the plaza. What a motley crowd it is! This crowd of spectators gathered from far and wide to behold this,



Trio of Dancers.

the most weird, unique and most amazing spectacle to be found in any part of the world. Here are Navaho with their gay blankets, their many necklaces of beads of shell and silver, Zuñi and dwellers of the pueblos beyond, cow boys and Mexicans, railroad men from along the line of the Santa Fe, tourists from California, Denver, St. Louis, Chicago and the East, scientists from the different centers of learning governors of States, presidents of railroads, bankers, and last, but not least, many ladies.

The procession of the two lines is similar to that of the preceding day, the varia-

tions in costume being too great to be considered here. The Antelope men, however, are attired as on the day before, with certain significant variations, of course, while the Snake men have their snake kilts and their bandoleers, each one of which is supposed to contain a portion of the human anatomy of some enemy slain in war. Each priest wears on his head a brilliantly colored head-dress of plumage, and has about his knee a tortoise-shell rattle. Each, also, has an endless profusion of turquoise and silver beads about his neck, each trying to outdo his neighbor in his display of his wealth. Each Antelope priest carries his peculiar rattle, while certain members of his fraternity carry the two tiponis. The asperger bears his

bowl of holy water with the aspergil. The Snake priests are provided with their whips, a bag of sacred meal and the long single black baho, made for them by the Antelope priests.

Again the two lines enter the plaza. The singing begins, one song being followed by another, until, as on the day before, the time comes for the approach to the kisi. Now, however, one of the Snake priests, the carrier, approaches, receives from the kisi a snake, which he places in his mouth, while another Snake man, the



Priest Returning to Kiva after Dance.

hugger, follows immediately behind him and places his arm over his shoulder, his office being to guard the man's face from the snake's head with his snake whip; then comes a third priest, the gatherer. These are followed by other trios, the first receiving a snake, until all the Snake priests have passed the kisi.

Occasionally a snake wriggles from the mouth of one of the men and is at once picked up by the gatherer. While the Antelope priests are continuing the singing, the line of Snake men moves round and round in a long circuit, each carrier receiving a new snake each time he passes the kisi, the huggers guarding the faces of the carriers and the gatherers receiving fresh acquisitions to their hands, until the supply of snakes in the kisi has been exhausted. One of the priests then steps forward and upon the ground draws a circle with sacred corn meal about five feet in diameter. Into this the gatherers drop their snakes in one wriggling, writhing mass. The entire line of Snake men then passes by this heap at a rapid gait. Each man as he passes plunges both hands into the mass and catches up as many snakes as he can possibly grasp in his two hands and starts off over the side of the mesa, the first man going to the north, the second to the west, and so on, continuing the ceremonial circuit

until the last snake has been gathered from the pile, when they are deposited at the foot of the mesa below, along with the and the Snake black bahos. Dance is practically over. sure, there are purification rites in the kiva on the night of this day, preceded by the drinking of

the emetic by all of the Snake men and by violent vomiting over the sides of the mesa, with a final feast in the kiva on that night. There are also four days following of jollification, when ceremonial



Circuit of Snake Priests, Walpi.



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Dancers, Oraibi.

games and pastimes are indulged in by all the members of the village, the young people especially devoting themselves to merrymaking.

For the average white visitor, with the disappearance of the last of the snakes in the hands of the priests over the side of the village and with the slow and measured return of the Antelope priests to their kiva, and with the drinking of the emetic by the Snake priests immediately on their return, the ceremony is at an end. Those pressed for time may be seen hurrying down to the foot of

the mesa where their drivers have already put the horses to the carriages, for there yet remains sufficient duration of twilight to enable them to make many miles of the homeward journey, while others, more fortunate and less pressed for time, return to their camps.

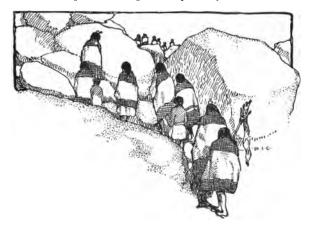
Naturally, there is one topic above all others: How is it that these priests, some of whom are mere infants, are not bitten and do not die from wounds of the rattlesnakes? This much may be said with confidence: There is absolutely no attempt on the part of the Hopi to extricate the fangs or in any other way whatsoever to render the snakes harmless. In the second place, so far as is known, the Hopi have no antidote for



The Dance, Walpi.

They neither rub their bodies nor take an antidote with them before going upon the hunt, while the drinking of the emetic and the violent vomiting immediately after the dance is a purification rite, pure and simple. Yet no Hopi Snake priest has ever been known to suffer from the bite of a rattlesnake. There seems to be but one answer to the question. and that is, that the Hopi Snake priests understand the ways of the rattlesnake, and are careful never to pick him up or to handle him when he has assumed a striking attitude. When a snake falls from the mouth of a carrier and coils, the whip is waved over it, whereupon it is picked up. It is also quite possible to believe that from the very moment the rattlesnake is ruthlessly seized in the field until he is released at the conclusion of the ceremony, he is handled with such recklessness that his constant desire is not to strike, but to flee. Again, it must be admitted that as soon as the snakes enter the kiva they are kept in tightly closed jars, hence by the end of the ceremony are probably in a dazed condition. But the rattlesnake, during the greater part of his captivity, is treated with the utmost unconcern.

And after this comes that other question: What does this all mean? The ceremony of the Snake and Antelope priests, presumably like all other ceremonies, is a dramatization of a ritual which had its origin in a myth, each recounting how, on some occasion in the far distant past, various events happened in a certain way and certain definite and tangible results followed. As it is enacted to-day, the Antelope-Snake ceremony is an elaborate prayer for rain, the snakes carrying down to the underground world, where they are in direct connection with the great plumed water serpent, prayers to the gods of the rain clouds that they will send such copious rains as will save the Hopi from hunger, and possibly from starvation.





Honanki Ruin, Red Rock Country.



Moki Children.







Ancient Home of the Hopi

Awatobi - Sikyatki - Homolobi - Black Falls - Walnut Canyon - Red Rock



N the road to Hopiland one passes many Navaho and many ruins, but the average traveler may fail to see either, for the ruins, like the Navaho, though numerous, are scattered and of the color of the desert and hence may be easily overlooked.

For convenience, we may consider the ruins of this region in connection with four geographical areas; Tusayan, the Little Colorado, Walnut Canvon and the Red Rock country. Other areas of Arizona, such as that occupied by the White Mountain Apache, must be passed over. The groups of ruins above named, however, have additional interest for us, for it is extremely probable that they were all occupied at one time or another by the ancestors of some of the clans now dwelling in Tusayan.

Ruins of Tusavan

Standing on the summit of the First Mesa there are at least fifty ruins within the sweep of the naked eye. Many of these ruins, carefully explored by trained investigators, and rich in material. have become well known to science.

One of the best known of these near-by ruins is that of Awatobi, the Place of the Bow People, or Tallahogan, the Singing House, as it is called by the Navaho. Awatobi occupies a

slope of a mesa which rises to the southeast, just north of the Jeditoh wash. Near the ruin, there project slightly above the level of the earth faint traces of the crumbling walls which mark the limits of the houses of the old city. Toward the northeastern corner of the ruins may still be made out the walls of an old Spanish mission. Back from the mesa, on the west side, is a number of sand dunes, covered with a scant growth of sage brush, their contours, however, changing, as the sand drifts in front of the wind.

The especial interest of Awatobi, however, is not in the character of the rooms, or in the wealth of pottery and other artifacts excavated in the burying-grounds, but in the history of the village itself. The researches of Bandelier brought to light a document of the date of 1722, in which the destruction of the town of "Ahuatuyba" is set forth briefly but explicitly. Additional testimony on this point was obtained by Dr. Fewkes from Caliko, a priestess of one of the religious orders of Walpi. cording to her story. Awatobi was a village of considerable importance, but not on good terms with the other Hopi villages. and several charges of misconduct are attributed to the men of Awatobi by the Walpi priestess. As a consequence, the chief of Awatobi quarreled with his people and invited the Oraibians to assist him in destroying the village. In the engagement which followed, Topolo, the Awatobi chief, and the Oraibians were not successful, and assistance was asked of the Walpians. After much consultation, the warriors, not only of Walpi and Oraibi, but of the other villages, agreed to attack Awatobi on the night of a certain day. According to the story, the approach was made on the east side of the village, where they entered by means of a gateway belonging presumably to the mission. From here they passed at once to the underground kiva where a ceremony was occupying the men of the village. They pulled up the ladder and shot arrows and burning brands among the priests and succeeded in destroying or capturing the remaining inhabitants of the village. Among those captured were several individuals skilled in magic, and they were especially careful to spare the women versed in the traditional songs and prayers of ceremonies, and who were willing to teach them; nor were any children intentionally killed. The village was destroyed, so far as possible, by means of fire. The results of Dr. Fewkes' explorations bear out not only the fact of the destruction of the village, as recorded by the Spanish priest, but the manner, as related by the Walpi priestess.

From the ruins of Awatobi is afforded a view up the Jeditoh or Antelope valley, which contains a number of interesting Hopi ruins,



Ruin at Black Falls, Little Colorado River.

all Hopi, some of which have recently been explored by Dr. Hough for the National Museum. Passing by these ruins and returning to the immediate vicinity of the First Mesa, we find on the east side, near the foot of the mesa, and less than a mile from Walpi, two prominent knolls, upon which may be traced portions of crumbling walls. This is all that is visible of an ancient city, which, according to tradition, was also destroyed by the Walpians long before the arrival of the Spaniards. Dr. Fewkes made a careful exploration of this ruin, and of the extensive burying-ground which surrounded the ruined walls of the village on three sides. From this vast tomb he exhumed probably the most beautiful and the most important collection of prehistoric pottery ever taken from any ruin in North America. The name given to the ruin by the Indians of to-day is Sikyatki.

South of Sikyatki, and at the foot of the mesa, still nearer the modern village of Walpi, may be traced here and there the dim outlines of walls, which, according to tradition, mark sites of ancient homes of the ancestors of the Walpians of to-day. A large number of the burying-grounds of these ruins have recently been thoroughly explored by Mr. Owen, for the Field Columbian Museum.

As the ruins of many ancient Walpis may be traced around the foot of the First Mesa, so, at the Second Mesa we may trace the ruins of a more ancient Mishongnovi and of an ancient Shumopovi. Two of these ancient villages have been carefully explored. Half way down the side of the Middle Mesa, near Mishongnovi. Mr. Owen was so fortunate as to unearth many hundred beautifully decorated earthenware vessels, as well as numerous stone implements and other artifacts, while at Shumopovi important series of ancient earthenware vessels have been excavated in the old burying-grounds by both Dr. Fewkes and Mr. Owen.

North of Oraibi for a distance of many miles, even as far as Kishuu, distant sixty miles, may be found one ruin after another. South of Oraibi and to the west, on toward the modern summer village at Moenkopi, may be found other ruins without end. In fact, the whole province of Tusayan may be characterized as one gravevard of ruins, with intervening mesas or stretches of level waste; nor does the modern boundary of the province of Tusayan mark the limit of these ruins. From the north they extend on beyond the San Juan, almost within sight of Salt Lake Toward the east the ruins continue to and beyond the canyons already mentioned, while toward the southeast and the south they pass imperceptibly from those which may be characterized as definitely known Hopi ruins to those of undoubted The province is a veritable Egypt, where one can not go far in any direction without encountering the low-lying walls of some ancient town, with its near-by necropolis among the sand hills.

Ruins of the Little Colorado

Perhaps the most famous ruin of the series which line the banks of this river for the course of many miles is that found just across the river, within three miles of the town of Winslow, and known as Homolobi. The ruin itself is marked by a single small knoll, the projecting walls of the houses being scarcely visible. Although the town of Homolobi could scarcely have contained more than a hundred inhabitants, yet, from the burying-ground occupying the northern slope of the mound and the plain just beyond have been secured by excavation over three thousand pieces of pottery, each piece beautiful, and nearly all possessing one or more symbols of interest to the student.

Passing on down the river toward its junction with the Colorado, we come to other and much more imposing ruins in the region of Black Falls. The country here is extremely arid, its general character being determined by great rivers of black lava, which have covered the red sandstone and limestone of the

region. Thus there have been formed by erosion many mesas and buttes, which tower above the surrounding country. Upon the summits of these mesas are the ruins, which, as a rule, stand on the brink of small canvons. The burying-grounds are generally found at the foot of the mesas in eroded pockets in the lava, which have been filled in with drifting sand. The walls of the houses are generally built with sandstone, although limestone was also used, as well as blocks of lava. No one of the many ruins of this extensive group lying within a radius of several miles of Black Falls has ever been thoroughly explored, but excavations already made show that, in pottery at least, the people of this region differed entirely from those of the Hopi ruins. The pottery of this region is not only much coarser, but is confined to the black corrugated ware, and the black and white ware. According to the researches of Dr. Fewkes, there can be no doubt that these ruins were occupied by certain Hopi clans, who, later on, deserted this region and joined other clans in Tusayan.

South of the Black Falls and in the vicinity of Flagstaff, are several ruins, all easily visited and worthy of a moment's notice. The majority of these ruins are of the so-called cavate type. It seems probable that the inhabitants of these caves, which have been excavated in lava, were not different from those of the pueblo ruins in the immediate vicinity. A drive to either of these groups of cavate ruins forms a pleasant excursion from Flagstaff, and need not consume over four or five hours' time.

The excursion from Flagstaff to the cliff houses in Walnut Canyon is strongly recommended to those who are unable to make a visit to the more stately cliff ruins of northern Arizona or New Mexico. The drive of an hour and a half is through an extremely picturesque country, and a personal examination of the ruins may be made with no danger, and with very little fatigue. The Walnut Canyon, in the region of the ruins, is exceedingly picturesque, its almost precipitous walls being covered with pine and cedar trees. An easy path from the end of the carriage drive leads downward to a distance of from one to two hundred feet, where, built in a great recess, on a ledge, begins a series of chambers which extend for a long distance in each direction. It is possible to pass along this ledge and visit one after another of these ancient houses, the walls of which are still black from the smoke of fires of long ago.

The Red Rock Country

In southern Arizona along the course of the Gila River, and extending up the Verde Valley to the famous Montezuma well, are extensive and innumerable ruins which have long been known to scientists. It remained for Dr. Fewkes to work from this point north along the Verde to Flagstaff, where he discovered many hitherto unknown ruins and thus extended the range of the early migrations of the Hopi all the way from Tusayan to the Gila River. This region, explored so recently, lies east of the railroad, between Ash Fork and Prescott, and may easily be penetrated from the latter city, or from Jerome.

The character of this region is described by Dr. Fewkes as follows:

"We made camp at the mouth of a wild canyon, six miles from Schürmann's ranch, surrounded by some of the wildest scenery that I have ever witnessed. The colors of the rocks are variegated, so that the gorgeous cliffs appear to be banded, rising from eight hundred to one thousand feet sheer on all sides. These rocks had weathered into fantastic shapes suggestive of cathedrals, Greek temples and sharp steeples of churches extending like giant needles into the sky. The scenery compares very favorably with that of the Garden of the Gods, and is much more extended. This place, I have no doubt, will sooner or later become popular with the sightseer.

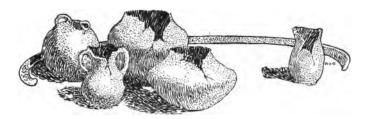
"On the sides of these inaccessible cliffs we noticed several cliff houses, but so high were they perched above us that they were almost invisible. To reach them at their dizzy altitude was impossible. * * * We moved our camp westward from this canyon (which, from a great cliff resembling the Parthenon, I called Temple Canyon), following the base of the precipitous mountains to a second canyon, equally beautiful but not so grand, and built our fire in a small grove of scrub oak and cottonwood. * * * On the first evening at this camp we sighted a bear, which gave the name Honanki, 'Bearhouse,' to the adjacent ruined dwellings."

The valley contains many interesting examples of the three well-known groups of ruins: (1) the ruins of the pueblo type, situated, as a rule, in the valley or on the plateau, but in each instance isolated and independent from any connection with

cliffs; (2) the cliff houses, built, generally, on ledges or in caverns in the sides of canyons, with overhanging roofs; and (3) the cavate dwellings or rooms excavated in the cliff walls. The most accessible group of the last named dwellings are to be found on the left bank of the Verde River, eight miles south from Camp Verde, and about three miles from the mouth of Clear Creek.

We may, perhaps, get a clew as to the reason for the number of ruins by the condition which we have seen to exist in the immediate vicinity of Oraibi. Here we saw some fifteen or twenty near the foot of the mesa. The majority of these ruins are small, and it seems probable that in the large village of Oraibi to-day we find lineal descendants of the inhabitants of these more ancient towns. This ancient pueblo people, although living in well-built stone houses, were, like the other Indians of North America, and like all aborigines, wanderers; and, like the tribes of the Plains, the old Hopi were continually on the move.

In the Hopi villages of to-day we have a congeries of clans, gathered together for mutual support, which probably came from every point of the compass. In any one of the larger Hopi villages it is extremely likely that we have descendants of people who once lived in the cliff ruins of the north and south, as well as in the ruins in the valleys in the immediate vicinity, along the Little Colorado and the country to the east and to the south. That the number of Hopi living at any one time in the ages gone by was greatly in excess of those of to-day is possible, but not very probable.





Jeditoh Springs.



Navaho Family.



The Navaho

Early History — Home Life and Industries — Wand, Plumed Arrow, Hoshkawn and Fire Dances — Future of the Navaho



HEN a traveler journeys to Hopiland, in Arizona, he crosses a portion of the Navaho reservation. It is one of the largest in the United States and contains about sixteen thousand Indians. So widely scattered are they, however, that one may travel many miles and not see a solitary representative of this race. Let the announcement go forth, however, that there is to be a

medicine dance at the lodge of a certain Indian, or that there will be at the trading post competitive games with a distribution of prizes, and Navaho fairly spring up out of the ground and make their way from every direction to the appointed place.

The territory occupied by the Navaho is extensive in area and extremely diversified in character. Thus, in the country along and to the north of the Little Colorado River are broad valleys and rolling prairies, with mesas and buttes rising up out of the desert here and there, while east and north it is very broken, with high tablelands and deep canyons. Everywhere the desert predominates, and we find an accompanying desert vegetation. Along the washes, however, and in the canyons water is to be

found during certain months of the year, while springs occur here and there. Near such sources of water are to be found the habitations of the Navaho, usually not more than eight or ten in a single vicinity, although in a canyon or well watered valley we may find perhaps as many as a hundred families. Nowhere, however, are the Navaho gathered into anything like the village communities of the Pueblo Indians, or even in groups, such as we find among many other tribes of the Southwest. Having strong migratory tendencies, and owing to the temporary nature of his habitation, the Navaho wanders here and there like a true nomad.

Concerning the early history of the Navaho not much is definitely known. Linguistically he is not only closely related to the Apache, but to many other tribes in the far north speaking dialects of the Athapascan tongue. He wandered southward along with the Apache in comparatively recent times, before the advent of the Spaniard. It seems probable that in his early days in the Southwest the band was not numerous, but as it wandered about from place to place, generally with hostile intent toward the peaceful sedentary Indians, this early horde gathered to itself the lawless and warlike people of many tribes. It is even known that many Pueblo people attached themselves to the Navaho in early times. This infusion of strange blood undoubtedly changed his character in many respects. From these alien people he probably learned the art of weaving and of making pottery.

Owing to a very peculiar circumstance, the character of the Navaho was entirely changed soon after the advent of the Spaniards. It is related that a band of Navaho on a predatory expedition obtained by theft a flock of sheep from the Spaniards along the Rio Grande. A few years later, owing to this circumstance, the Navaho gave up very largely the quest for blood and became Bedouins, cultivating the more peaceful arts and looking after their flocks. The women now became expert in the manufacture of blankets. They obtained at an early date peaches and other fruits from the Rio Grande peoples, and began to cultivate small orchards, when their life underwent a





Navaho Camp Scene.

further change, and they became more and more sedentary in their habits.

To-day we find the Navaho possessing enormous flocks of sheep. From the sale of wool, as well as blankets, they derive a steady income. They also maintain orchards, small patches of corn and melons, and cultivate large areas of beans, which they sell to traders with much profit. This new life compels them to remain in a fixed spot for certain months, but the necessity of finding fresh pastures for their flocks keeps them more or less continually on the move during the remainder of the year.

In appearance the Navaho is tall, rather slender, and extremely agile. Both sexes, almost from birth, are at home on the pony, of which they own large numbers, and the men are famous for their ability in running. At first acquaintance they are silent and seemingly unfriendly, but on closer acquaintance they are found to possess a great store of humor, and a cheerful and happy disposition. They are very fond of games and sports of all sorts and are inveterate gamblers, the women passing much of their time in playing with long wooden dice, while the men play for hours at monte. Of their ancient costume there is very little left. Both men and women almost universally wear moccasins, and both use garters and hair strings and a belt of their own make. Otherwise they dress after the fashion of the whites, both sexes, on gala days and when they can afford it, wearing velvet clothing. They are exceedingly fond of wearing many-strand necklaces of shell beads interspersed with turquoise, while the men have a passion for jewelry of silver, wearing about their waists leathern belts upon which are strung large silver disks. They also use silver buttons on their moccasins, and often have silver pendants in their ears.

The houses or hogans of the Navaho, while not enduring, as are those of the Pueblo people, are made with care, and are admirably adapted to the desert. The winter house is more carefully built than the summer shelter. About a circular excavation, fifteen feet or so in diameter, is placed a row of piñon or cedar posts which converge toward the top, which is left open for the exit of the smoke. Over this rough framework is placed a layer of small brush, to which is finally added a thick coating of adobe. The summer shelter is not so pretentious. Often it is nothing more than a circular cleared spot of ground surrounded by a windbrake of sage brush; or again, it may be built on the side of a hill, the floor being leveled so that there is formed at the back a wall two feet in height. At the front are placed two uprights with a crossbar, upon which rest many poles terminating at the back on the summit of the wall. is then covered over after the manner employed in building the winter hogan.

The furniture of a Navaho house is exceedingly scant. Around the walls are to be found different forms of baskets, most of which they secure in barter from other tribes, chiefly the Utes, Hopi and Havasupai. In the *hogan* are usually to be found one or more rudely fashioned round-bottom earthen-

Navaho Loom, with Unfinished Blanket.

ware vessels, used for cooking purposes. These, together with a few blankets, ordinarily make up the furniture of the house. Should the owner be a medicine-man or one of wealth, this list of furniture would be considerably extended.

The routine life of the Navaho is largely concerned in the care of flocks and the gathering of crops. The sheep and goats must be constantly herded, while the shearing and preparing of the wool for the market or for the loom demands considerable attention. In a land where wood is not plentiful, gathering fuel plays a certain part in their routine life. For this purpose sage and greasewood are largely used.

These occupations, together with the cultivation of the diminutive fields, form their chief pursuits.

Many of the Navaho are expert silversmiths, and with rude appliances picked up on the outskirts of civilization they convert large quantities of Mexican money into beads, rosettes, buckles, necklaces, ear-rings, bracelets and finger-rings. Some of the men occupy themselves with the manufacture of shell beads, but most of these are obtained by barter from the Zuñi or from the Pueblo people of the east.



Bedouins of the Desert.

The great industry of the women is carding and spinning wool for its manufacture into blankets, of which many thousands are annually sold. Whether the Navaho women manufacture baskets or not has been a disputed question. That they use many baskets in their domestic and ceremonial life is an undisputed fact; but that the Navaho women, except in few instances, actually manufacture baskets is not true. Their best known product is the so-called marriage basket, which, on account of its artistic workmanship and gracefulness of design, is much sought after for decorative purposes. The art of making pottery seems to be on the decline, the easy possibility of acquiring suitable vessels for cooking purposes from the trader, and the fact that the woman can spend her time to better profit in the manufacture of blankets, having rendered this form of service unprofitable.

Very few white men, apart from those dwelling in the immediate vicinity, have ever witnessed any Navaho religious ceremonies. In fact, it is not generally known that there exist among the Navaho many important ceremonies, comparable in interest with those performed by the Hopi and other more sedentary Indians of the Southwest. These Navaho ceremonies differ from those of the Hopi, inasmuch as their performance is ostensibly to cure the sick, and they are in charge of shamans or medicine men. The occasion, therefore, of a ceremony is incident to the sickness of some individual of a well-to-do family. In this case the family and friends of the afflicted

determine the character of the ceremony to be held, whereupon the particular shaman capable of performing the ceremony is called; after preliminary rites the ceremony begins. It is usually of nine days' duration. The earlier rites are secret, and are performed in a corral or lodge especially constructed for the purpose. On the conclusion of these secret rites there is, as a rule, a public performance, which may be witnessed without hindrance. In one of the Navaho ceremonies described by Dr. Mathews there are interesting performances in connection with the swallowing of plumed arrows, and in connection with a great fire. The following abbreviated description from Dr. Mathews will give some idea of this curious performance, rivaled for its element of weirdness only by that of the Snake Dance:

"The building of the great stack of wood which was to furnish the fire in the center of the corral on the last night went on simultaneously with the painting of the picture. In more secret spots in the rugged walls of a canyon, about half a mile from the medicine lodge, other shelters were erected, where visiting performers were to prepare themselves on the last night. Many young men were busy in the afternoon cutting down the trees and lopping off the branches which were to form the great corral (the ilnasjin, the dark circle of branches) on the next day. Some of the visiting women were busy grinding meal and attending to different household duties; others played cards or engaged in the more aboriginal pastime of azilcil, a game played with three sticks and forty stones, the latter for counters. On Tuesday the work in the lodge consisted in preparing certain properties to be used in the ceremonies of the night. These were the wands to be used in the first dance, the katsoviscan or great plumed arrows, and the trees which the dancers pretended to swallow. * * * At eight o'clock a band of musicians entered, sat down beside one of the small fires in the west, and began to make various vocal and instrumental noises of a musical character, which continued with scarcely any interruption until the close of the dance in the morning. At the moment the music began the great central fire was lighted,



Navaho Chicken Catching Contest.

and the conflagration spread so rapidly through the entire pile that in a few moments it was enveloped in great flames. A storm of sparks flew upward to the height of a hundred feet or more, and the descending ashes fell in the corral like a light shower of snow. The heat was soon so intense that in the remotest. parts of the inclosure it was necessary for one to screen his face when he looked towards the fire. And now all was ready to test the endurance of the dancers who must expose, or seem to expose their naked breasts to the torrid glow.

WAND DANCE.—"When the fire gave out its most intense heat, a warning whistle was heard in the outer darkness, and a dozen forms, lithe and lean, dressed only in the narrow white breech-



Navaho Mother and Child on Horseback.

cloth and moccasins, and daubed with white earth until they seemed a group of living marble, came bounding through the entrance, velping like wolves and slowly moving around the fire. As they advanced in single file they threw their bodies into divers attitudes—some graceful, some strained and difficult, some menacing. Now they faced the east, now the south, the west, the north, bearing aloft their slender wands tipped with eagle down, holding and waving them with surprising effects. Their course around the fire was to the left, i. e., from the east to the west, by way of the south, and back again to the east by way of the north, a course taken by all the dancers of the night. the order never being reversed. When they had encircled the fire twice they began to thrust their wands toward it, and it soon became evident that their object was to burn off the tips of eagle down; but owing to the intensity of the heat it was difficult to accomplish this, or at least they acted well the part of striving against such difficulty. One would dash wildly towards the fire and retreat; another would lie as close to the ground as a frightened lizard and endeavor to wriggle himself up to the fire; others sought to catch on their wands the sparks flying in the air. One approached the flaming mass, suddenly threw himself on his back with his head to the fire, and swiftly thrust his wand into the flames. Many were the unsuccessful attempts; but, at length, one by one, they all succeeded in burning the downy balls from the ends of their wands. As each accomplished this feat it became his next duty to restore the ball of down. The mechanism of this trick has been described, but the dancer feigned to produce the wonderful result by merely waving his wand up and down as he continued to run around the fire. When he succeeded he held his wand up in triumph, yelped and rushed out of the corral. The last man pretended to have great difficulty in restoring the down. When at last he gave his triumphant yell and departed it was ten minutes to nine."

PLUMED ARROW DANCE.—"After an interval of three-quarters of an hour, the dance of the great plumed arrow, the potent healing ceremony of the night, began. There were but two performers. * * * Each bore in his hand one of the great plumed arrows. While they were making the usual circuits around the fire, the patient was placed sitting on a buffalo robe in front of the orchestra. They halted before the patient; each dancer seized his arrow between his thumb and forefinger about eight inches from the tip, held the arrow up to view, giving a coyote-like yelp, as if to say, 'So far will I swallow it,' and then appeared to thrust the arrow slowly and painfully



Navaho Baby in Cradle.

down his throat as far as indicated. While the arrows seemed still to be stuck in their throats, they danced a chasse, right and left, with short, shuffling steps. Then they withdrew the arrows, and held them up to view as before, with triumphant yelps, as if to say, 'So far have I swallowed it.' Sympathizers in the audience yelped in response. The next thing to be done was to apply the arrows. One of the dancers advanced to the patient, and to the soles of the feet of the latter he pressed the magic weapon with its point to the right, and again with its point to the left. In a similar manner he treated

the knees, hands, abdomen, back, shoulders, crown and mouth in the order named, giving three coyote-like yelps after each application." * *

HOSHKAWN DANCE.—"It was after one o'clock in the morning when the dance of the hoshkawn (Yucca baccata) began. The ceremony was conducted in the first part by twenty-two persons in ordinary dress. One bore, exposed to view, a natural root of yucca, crowned with its cluster of root leaves, which remain green all winter. The rest bore in their hands wands of piñon. Whatever properties they may have had concealed under their blankets the reader will soon be able to conjecture. On their third journey around the fire they halted in the west and formed a close circle for the purpose of concealing their operations, such as was made in the eighth dance. After a minute spent in singing and many repetitions of 'Thohay,' the circle opened, disclosing to our view the yucca root planted in the sand. Again the



Navaho Mother with Child.

circle closed; again the song, the rattle, and the chorus of 'Thohay' was heard, and when the circle was opened the second time an excellent counterfeit of the small budding flower stalk was seen amid the fascicle of leaves. A third time the dancers formed their ring of occultation; after the song and din had continued for a few seconds the circle parted for the third time, when, all out of season, the great panicle of creamy yucca flowers gleamed in the firelight. The previous transformations of the yucca had been greeted with approving shouts of laughter; the blossoms were hailed with storms of applause. For the fourth and last time the circle closed, and when again it opened the blossoms had disappeared and the great, dark green fruit hung in abundance from the pedicels." * *

FIRE PLAY.—"The eleventh dance was the fire dance, or fire play, which was the most picturesque and startling of all.

* * Every man except the leader bore a long, thick bundle



Herd of Navaho Ponies.

of shredded cedar bark in each hand and one had two extra bundles on his shoulders for the later use of the leader. latter carried four small fagots of the same material in his hands. Four times they all danced around the fire, waving their bundles of bark toward it. They halted in the east: the leader advanced towards the central fire, lighted one of his fagots, and trumpeting loudly threw it to the east over the fence of the corral. performed a similar act at the south, at the west, and at the north; but before the northern brand was thrown he lighted with it the bark bundles of his comrades. As each brand disappeared over the fence some of the spectators blew into their hands and made a motion as if tossing some substance after the departing flame. When the fascicles were all lighted the whole band began a wild race around the fire. At first they kept close together and spat upon one another some substance of supposed medicinal virtue. Soon they scattered and ran apparently without concert, the rapid racing causing the brands to throw out long brilliant streamers of flame over the hands and arms of the dancers. Then they proceeded to apply the brands to their own nude bodies and to the bodies of their comrades in front of them, no man ever once turning around: at times the dancer struck his victim vigorous blows with his flaming wand; again he seized the flame as if it were a sponge, and, keeping close to the one pursued, rubbed the back of the latter for several moments, as if he were bathing him. In the meantime the sufferer would perhaps catch up with some one in front of him and in turn bathe him in flame. At times when a dancer found no one in front of him he proceeded to sponge his own back, and might keep this up while making two or three circuits around the fire or until he caught up with someone else.

each application of the blaze the loud trumpeting was heard, and it often seemed as if a great flock of cranes was winging its way overhead southward through the darkness. If a brand became extinguished it was lighted again in the central fire; but when it was so far consumed as to be no longer held conveniently in the hand, the dancer dropped it and rushed, trumpeting, out of the corral. Thus, one by one, they all departed. When they were gone many of the spectators came forward, picked up some of the fallen fragments of cedar bark, lighted them, and bathed their hands in the flames as a charm against the evil effects of fire."

That such elaborate ceremonies should be performed solely for the curing of the sick seems hardly credible. It appears that in connection with the value of these ceremonies is the idea of a more general benefit. Nor are invocations for the success of the crops and for the increase of the herds omitted. In all these nine days' ceremonies there also is present the element of the dramatization of great cosmic myths, thereby perpetuating the religious symbolism of the tribe. During the public performance especially, the occasion is made a time of sociable reunion.

Obviously, owing to the very nature of the ceremonies (inasmuch as their performance is not on stated occasions but dependent upon the will of certain individuals), it is not possible to give even approximate dates when they may be seen. While occasionally it may be possible to see a ceremony in summer, the likelihood of witnessing it is much greater in winter, the season when there is no thunderstorm, and when the rattle-snakes are asleep.

Those who are desirous of seeing the art of weaving perpetuated among the Navaho women should encourage the manufacture of the better grade blankets, and especially of the use of the native and more



Navaho Family Before Winter Hogan.



Navaho Summer Shelter.

durable dyes. The condition of the men may be helped by giving them the opportunity to work. They have proven on many occasions their ability to do manual labor, and have been employed successfully as day laborers. The home of the Navaho seems perfectly adapted, at any rate for the present, to his requirements; and his temporary structure,

like that of the tipi of the Plains Indians, possesses one great advantage not possessed by the frame houses often thrust upon the Indians by well-meaning but thoughtless people: for the frequent removal of the Navaho, as of other Indians, from place to place is conducive to cleanliness and better life. That the power of the medicine-man among the Navaho should be curtailed there is no question. For while there can be no objection to the performance of purely religious ceremonies among any of the native tribes of America, there is an objection to the entrusting of the life of a person to the nine day performance of a shaman and his assistants, as is the case in this particular Remove this power of the shaman and give the Navaho work and see to it that his pasture lands are not encroached upon, and he will work out his own salvation without the assistance of higher education or donations of cast-off clothing. wish to know the Navaho intimately should visit the reservation in the winter and should be prepared to spend, not days but weeks or months, roaming from hogan to hogan, where they may always be sure of a welcome.





The Apache

Mescalero, Jicarilla and White Mountain Bands — Home Life and Industries
— San Carlos



HE Apache are conveniently divided into the Eastern and Western bands. The former includes the Jicarilla and Mescalero Apache. The Western bands comprise the Coyotero, Pinal, Aravaipa, Chiricahua and others.

For many years previous to 1872, both the Eastern and Western bands of these fierce and warlike people gave endless trouble to the United

States authorities. By force of arms and treaties, in that year, however, they were settled on reservations in New Mexico and Arizona—in 1887 the Jicarilla in northwestern New Mexico; in 1883 the Mescalero in central New Mexico; between 1871 and 1877 the Western bands upon the White Mountain and San Carlos Reservations. As the Arizona Apache are more numerous and better known, they will be considered in greater detail than the New Mexican Apache.

Mescalero Apache

The reservation of this tribe, which numbers nearly four hundred and fifty, is easily reached from Tularosa on the El Paso & Northeastern Railway. It is about one



A pache Mother and Child.

hundred miles from El Paso, and contains 475,000 acres of land, of which only a portion is cultivable. Much of the reservation is made up of rugged mountains, on whose sides are forests of pine, cedar, piñon, fir and oak, with intervening valleys containing fine pastures. At the base of the mountains are copious springs. Antelope, deer and wild turkey are abundant. Necessarily little attention is paid to farming. The Mescalero possess cattle, horses, sheep and mules. The tribe is divided into two clans, each with its chieftain. They manufacture baskets of willow, large numbers of which they exchange with their Mexican neighbors and sell to collectors. Ceremonial dances of four days' duration are frequently held. At death, all the effects of the deceased are burned. Among them, the medicine-man has lost his prestige. Upon their aboriginal religious ideas have been grafted some notions acquired from the Mexican religion. At an early day, these people were most difficult to subdue, making raids continually upon their neighbors, and harboring for a time the hard pressed members of other Apache bands.

Jicarilla Apache

The Jicarilla number over eight hundred persons and occupy a reservation in northern New Mexico, adjoining the southeast corner of the Southern Ute Reservation in Colorado. It is easily reached from Dulce, on the Denver & Rio Grande

Railway. It is thirty-four miles long from north to south, and twenty-two miles from east to west, containing 416,000 acres, mostly suitable for grazing. On the low hills and mesas is excellent pine timber, the inner bark of which is used by the Jicarilla in several different ways. Stock-raising and basket-making are their chief occupations.

The tribe is divided into three bands, each having a chief, under a head chief chosen at a joint meeting of the three bands. They are small of stature and sinewy. With them, as among the other Apache, "tiswin," a drink manufactured from fermented corn, is consumed in considerable quantities. They are inveterate gamblers, principally playing cards and pitching quoits, using in the



A pache Girl.

latter game, instead of rings, a pointed stick thrown at a mark upon the ground. Men and women alike use tobacco. Marriage is performed in the usual Apache fashion. Mother-in-law and son-in-law never speak. Polygamy is practiced by chiefs and wealthy men. At the birth of a child it is given a name in keeping with some event occurring at the time. Its name is known only to itself and its parents until marriage, when it is told to the second party in the contract. It is said that these Indians make a secret disposal of their dead, as do the Southern Utes of Colorado. After death the relatives cut their hair and cease painting their faces for a time. Pork



Mormon Village of Showlow.

and fowls are tabooed. Their dances are not numerous, the principal one occurring in the spring. Witchcraft still lingers among them, and the services of the medicine-man are resorted to in cases of sickness. They prefer to live in tents.

White Mountain Apache

The White Mountain Apache Reservation, lying in east central Arizona, is reached by a daily stage from Holbrook to Fort Apache, a distance of ninety-six miles. The trip is made without stop except for change of horses at stage stations,

where meals can be procured. Leaving Holbrook about three o'clock in the afternoon Fort Apache is reached at eight the next morning, the fare for the round trip being fifteen dollars. A far pleasanter journey can be made by a private conveyance from the livery stable at Holbrook. A carriage seating four persons and driver costs \$5 a day. Meals and lodging en route about \$2 a day. Leaving early in the afternoon, Snowflake, on Silver Creek, thirty miles distant, is reached in time for supper at a good hotel. This little Mormon settlement is regularly laid out, with running water through the streets. The houses are built of brick, and the village presents an air of thrift.

Resuming the journey after breakfast, Taylor and Shumway, two small but prosperous Mormon hamlets, four and eight miles distant, are passed. Between Shumway and Showlow, twenty miles from Snowflake, one first encounters that vast region of igneous rock extending from the San Francisco Mountains to Mount Taylor on the southeast. Lava beds three thousand feet in thickness are found in the vicinity of Thomas Peak just off the reservation. Greens Peak, in the extreme northeast corner of the reservation, is the center of an extended basalt area. At Showlow Mr. Adams feeds the hungry man in good western style.

Beyond Showlow, pines appear and beneath their shade one rides to the summit of the divide near Pinetop, a distance



In Pine Forest, On the Way to Fort Apache.

of fourteen miles. Below this hamlet, amid the pines, in a beautiful park-like valley 7,650 feet above the level of the sea, lives genial Colonel Cooley, famous as a guide and scout in Apache warfare. The evening is pleasantly spent in listening to tales of a life of twenty-five years among the Apache.

A drive next morning of twenty miles, through a portion of Black Canyon and along the west bank of the North Fork, brings you to Whiteriver Agency. Here excellent accommodations may be obtained at the home of the Government agent. From the agency a short drive of four miles brings you to Fort Apache, a picturesque military post on the south bank of White River, where several hundred soldiers are stationed.

The White Mountain Apache Reservation is ninety-five miles long from north to south and seventy miles wide from east to west. It contains 2,528,000 acres. The northern portion is drained by the Salt River, with several tributaries emptying into the Gila River. These are fed by the melting snows from the



Al-che-say.

upper mountain ranges. Along their banks are small areas producing abundantly when irrigated. Within the reservation have been gathered at various times the Coyotero, Pinal, Aravaipa, Chiricahua, and other western bands, along with the White Mountain Apache. At an elevation varying from three to eleven thousand feet, we find cactus, yucca, agave, greasewood, sage brush, cedars, pines and firs, and a plant life varying from the semi-tropical to the sub-Alpine. Bear, deer and wild turkey are abundant upon the mountain slopes. The tributaries of the North Fork teem with trout. Along the streams, in groups, are the "campos" of the various bands, each with its petty chief, and designated, for the convenience of the Indian agent, by a letter of the alphabet. There are about 1,850 Apache at Whiteriver Agency, and 2,900 at the San Carlos Agency.

The various bands have intermarried to some extent. A few white men and Mexicans have married Apache women.

Basket-making is the principal industry among the women, two kinds being produced. The bowl-like basket tsa, and the tus, "sewed water jugs." The coils of these baskets are made



A pache Scout at Home.

of either cottonwood or willow. The wrapping of the coil is always cottonwood. cellently woven burden-baskets are also These are ornamented in colored zones, their bases being protected by buckskin, with four strips of the same material extending from the bottom to the rim. They also make water vessels of bottle form. The bush of the squaw-berry is invariably used for this purpose. Some makers of these vessels fill the interstices with the crushed berries of the cedar before coating them with the piñon gum. The black designs in the sewed basketry are made from the pod of a species of Martynia. Occasionally very rude baskets are woven of green yucca, the designs in them being made of roots of the Spanish bayonet.

Their houses or "campos" are of a low, oval form, of height sufficient to allow one to stand erect in the center. They are made of poles thrust into the ground and drawn together at the top. With these, twigs and grasses are interlaced and very frequently huge pieces of canvas are stretched over them. Houses of the rectangular form, not unlike those occasionally found among the Navaho, are sometimes seen. These dwellings are usually located along the streams in the vicinity of fields. During the winter season many withdraw to the timber, where houses are constructed from heavier materials. Water in such localities is procurable only from melting snows during the winter season. Where lumber can be had, rude houses or sheds are now being made by the Indians.

Beneath the sloping edges of the "campos" are placed the various house furnishings. In the center is a fireplace, hollowed out of the ground, the smoke escaping through an aperture in the roof. The household utensils are few in number. Saddle bags made of rawhide, of rectangular form and fringed at the ends, usually contain the most valuable and less-used personal effects. These saddle bags are used for storage purposes at home or for pack purposes on the march. Blankets and

skins, rolled up when not in use, furnish bedding for the household. meal time the Apache sit about the vessels containing their food, helping themselves at will. When not thus engaged, they lounge about "campos." Huge gourds, often provided with a neck of basketry, are sometimes used for the storage of water about the house. Occasionally decorated gourd dippers are found. These are highly prized and are difficult to obtain. Small circular mortars of malapais are used in preparing paints. Upper and lower mealing stones of the same material are used in grinding coffee, crushing berries and



Col. Cooley, former Scout under Gen, Crook.

roots for food purposes. The fire drill is occasionally used. The lower stick is made from the stock of the Spanish bayonet, the upper one of greasewood.

Formerly, the men's dress consisted of a loin-cloth and buckskin moccasins. The moccasins have a hard sole, curving upward above the toe for protection against thorns and cacti. The better moccasins have exceedingly long "uppers," reaching to the thighs, and thus serve as a protection to the legs. Commonly, however, they are worn in three or four folds, reaching only to the knee. As the lower portion is worn out they are drawn down, until from wear, a moccasin formerly reaching the thighs barely covers the ankles. The moccasins are often sparingly decorated with painted designs and beadwork. Those entirely covered with beads are made merely for trade.



On the Road to Apache Reservation.

Men and women wear their moccasins interchangeably. When more completely equipped, they formerly wore over one shoulder a buckskin, which was tied beneath the arm on the opposite side.

The women wore on ceremonial occasions a short buckskin shirt or waist, with V-shaped openings at the neck. About the yoke were designs in variously colored beads, usually red, white and black. Below these were one or two rows of tin pendants, either in rows or groups. Upon the open sides of these shirts or waists and extending over the shoulder was an applique design of red flannel. Occasionally brass buttons, of which they are fond, were used in their ornamentation. The buckskin skirts worn with them were very heavy. About the upper portion was a long fringe, and near the bottom two rows of fringe with tin pendants. The portion of the dress below these pendants was often painted with yellow ocher. At the bottom were fringes with tin pendants attached.

Men and women wear necklaces of many-colored beads; some consist of many strands of beads hanging loosely upon the breast, others a flat band of beads in diamond-shaped designs. The women wear ear-rings with several strings of variously colored beads attached. Bead bracelets are worn by both men and women. Copper, brass and iron wire, variously ornamented, is also utilized for this purpose. Maidens wear upon their back hair a highly prized ornament of leather, in



Camp of Al-che-say, A pache Scout.



U. S. Paymaster's Stage, En Route to Fort Apache.

the form of a figure eight, more or less heavily decorated with brass buttons. Ornaments consisting of two or more feathers from the tail of the eagle are attached by buckskin thongs to the hair of the men, or are worn upon their hats. In times of mourning the hair is cut squarely off around the head and stands in a disheveled mass.

The faces of men and women alike are frequently tattooed among the Apache. The center of the forehead and the chin are most frequently covered with geometrical designs of a dark blue color. Occasionally a design upon the forehead is produced downward to the end of the nose.

Acorns, sunflower seeds, pine nuts, willow buds, walnuts, juniper berries, mesquite beans, and mescal are eaten. The meat of the deer and wild turkey is a favorite article of food. Fish and fishing birds are not eaten. The mescal is used in various ways. At maturity, while the flower stock is still tender, the "cabbage" is cut and placed upon a pile of rocks highly heated, covered with bear grass, over which earth is



Freighting from Holbrook to Fort A pache.



A pache Ring and Javelin Game.

heaped. After twenty-four hours the bear grass and earth are removed, leaving a pulpy mass which contains a syrup of the consistency of molasses. This portion of the plant is very highly esteemed. They also crush together mescal and ripe black walnuts, over which they pour water, making a dish of mush-like consistency. The more fibrous portions are bruised, formed into thin cakes and preserved for future use. Squaw-berries are crushed and, with meat, form a dish which they greatly relish. From an early day the Apache have possessed, in small quantities, corn and melons.

Their game is secured by means of the bow and arrow and traps. Their bows are from four to five feet long, backed with sinew most carefully placed. The arrows consist of a reed-like shaft, a hardwood foreshaft, with a tip of flint, obsidian or chalcedony. The quivers are made of tanned deer-skin or the skin of the mountain lion, with the tail hanging downward.

The weapons of the Apache are the bow and arrow, spear and war club. They made use of poisoned arrows, which were thrust into the liver of a deer that had been bitten by a rattle-snake. The war club consists of an oval boulder encased in raw hide, with handle attached. The spear has a long wooden shaft, to which has been cleverly hafted by means of the skin of a cow's tail, a sword-blade, bayonet or other iron object of similar form. The Apache say that "long time ago" they constantly wore about their waists lariats of horse hair, which they wielded with considerable effect in entangling an enemy.

Like all other Indians, the Apache are great gamblers. The women play the stave game (tsay-dithl) or throw sticks. Three two-faced billets are used, from eight to ten inches long. Within a circle of stones five feet in diameter the staves are thrown upon a rock in the center so as to cause them to rebound, and as they fall, flat or round faces upward, the throw counts from one to ten. Whoever first scores forty points wins. Both men and women play the stave game (haeegohay), using four two-faced staves. One stave of different markings from the rest is called the man; the remaining three, women. The count varies according as the staves fall. The men play naashosh, a variety of the ring and javelin game. Spanish cards are constantly used. Occasionally, at a great expense of time, they have made sets of playing cards of horse hide, with Mexican designs.

Very soon after birth the child is put into its cradle, which consists of a board made of slats, with a hood of the same or lighter material. When once a child has been placed in a cradle, it must thereafter occupy no other. Polygamy prevails, with certain restrictions. Very often a man marries his wife's younger sisters as fast as they mature; or, if she has none, he marries among the members of her clan, to prevent the women from fighting among themselves. If a man marries his brother's widow, he must do so within a year, or she is free to look elsewhere for a mate. Most marriages still take place in the Apache fashion; that is, by purchase.

At death adults are usually interred beneath the ground or in clefts of rocks, in either case being given considerable covering of earthly material. Children are frequently buried in trees,



A pache Village Life.



An A pache Family.

the body being enveloped in clothing and blankets and placed upon a platform of sticks among the branches.

Any young man can enter the ranks of the medicine-men among the Apache if endowed with the requisite natural gifts. Apparently there is no fixed tenet or doctrine among the medicine-men. Each follows his own inclinations, invents his own symbolism. They indulge in no intoxicating decoctions.

The use of charms is wide. Beads of lightning-riven rock and

charms made from the wood of a lightning-riven tree are especially powerful in the cure of disease and protection from evil. Stone beads obtained from the graves and ruined pueblos exert powerful protective influences. Charms of various kinds purchased from the medicine-man afford great protection. The symbolism portrayed upon the medicine shirts is little known. The figures of Gans are usually present. The lightning, whose awful power they revere, is also depicted; the storm cloud is occasionally found upon them, also designs representing the four winds and the four world-quarters.



Uncle Sam's A pache Scouts.



Crossing North Fork of White River, Apache Reservation.



An Apache Cupid.

Of the three forms of musical instruments made by the Apache, the most interesting is a violin ("singing wood"), consisting of a hollow cylinder with a single sinew string and a small bow provided with horse hair. Their drums, usually improvised for the occasion, consist of a deer-skin head tightly stretched over an iron pot, galvanized iron bucket or other convenient vessel. These drums are always partially filled with water when in use. They are beaten with a stick having a loop at

one end. Three kinds of dances are indulged in, namely, the ordinary social function, in which the men and women take part, the so-called Devil's Dance and the Medicine Dance.

Early writers describe the Apache as being about five feet and five inches high, slimly built and agile, light-hearted, but subject to fits of superstition and timidity. Very often, however, one may see among them men ranging above six feet in height and finely proportioned. The reputation for ferocity and cunning, honestly acquired by one or two bands of the Apache, should not be imposed upon the entire tribe, as is too often done, for no tribe of the great Southwest has been as grossly maligned as the Apache.

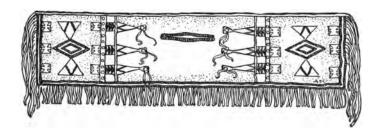


A Party of A pache.

San Carlos Agency

The San Carlos Agency of the White Mountain Apache Reservation is situated on a mesa immediately below the junction of the San Carlos with the Gila River, about thirty miles southeast of Globe, on the Gila Valley, Globe & Northern Railway, and about ninety miles north of Bowie on the same line.

Many stories are told of the encounters of the Apache with the Pima and Maricopa, and many localities between their respective reservations are pointed out by knowing ones as scenes of fierce battles between the peaceful Pima and the plundering Apache. In this vicinity was enacted the horrible massacre by the Apache of several members of the Oatman family, in 1851, and the captivity of Olive Oatman, who remained a captive for a year or more and was then sold to the Mohave Indians, by whom she was held until 1856. It was at San Carlos that Mr. Augustus Thomas secured the local coloring for his realistic and admirable play, "Arizona."

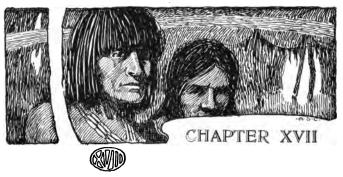




Havasupai Summer Shelter, Cataract Canyon.



San Xavier Mission and Indian School.



Tribes of the Yuman and Piman Stocks.

How Reached — Havasupai — Walapai — Mohave — Chemehuevi — Maricopa — Yuma — Apache - Yuma — Pima — Papago



HE Navaho and Apache are late arrivals in the desert; the Pueblo peoples have been forced into the desert by warlike foes, but the tribes now to be considered seem to form an intrinsic element in the barren, sun-scorched plains of the Southwest; they are true desert people. To visit all of them necessitates four journeys of considerable length. It may be stated here,

however, that should one desire to visit all the tribes about to be described, the route would be westward from Winslow. Arizona, on the Santa Fe to The Needles, stopping en route at Williams for the Havasupai and at Hackberry for the Walapai. At The Needles the Mohave could be visited in the immediate vicinity, or by boat down the Colorado River to the Mohave Reservation, the river journey being broken for a visit to the Chemehuevi. From The Needles the Santa Fe train is taken back to Ash Fork, where another train is taken for Phœnix. From this city the Pima and Maricopa on the Salt River Reservation may be visited. From Phoenix the route is to Maricopa, near which is the Gila River Reservation, also occupied by Pima. From Maricopa the journey is west to the Colorado River at Yuma, where the reservation of the Yuma is located, stopping on the way at Gila Bend for the western branch of the Papago. From Yuma the return is made east as far as Tucson for the remaining Papago.

Yuman Stock

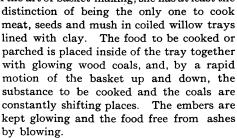
HAVASUPAI

The beautirul home of this little band of two hundred and fifty Indians is easily reached by a branch of the Santa Fe from Williams to Coconino, fifty-seven miles due north, en route to the head of Bright Angel Trail, Grand Canyon. The distance from Coconino to the Havasupai village is forty miles, covered in eight hours by private conveyance, part of the way in a team, which can be had at Coconino, the remainder on horse-back down a steep trail; or one may continue through to Bright Angel by train and start from there overland. The cost of the four days' round trip, including wagon, meals, lodging, guides, etc., will be about thirty-five to fifty dollars each person.

This tribe is allied to the Walapai, their near neighbors on the west, and speak the same language with slight variation of dialect. Their village is romantically situated in Cataract Canyon, about one hundred miles north of Williams, Arizona, surrounded by crags, cliffs and mountains. There are beautiful falls of water over precipices of from one hundred to three hundred feet, and back of the falls are caves and grottos glistening with the stalactites and stalagmites that adorn their roofs and floors.

The Havasupai have kindly traits of character, are hospitable and show a willingness to oblige. Living as they do, in a deep canyon remote from the whites, few changes are wrought from year to year. Corn, melons, pumpkins and peaches grow in profusion and with little effort on the part of the cultivators.

While the Havasupai woman may not be regarded as exceptionally proficient in the art of basket-making, she has at least the





Havasupai Girl.

The baskets made by Havasupai women are principally of three forms. One is the burden or carrying basket, conical in shape, of unsplit willow, with two horse hair loops on opposite sides for the fastening of a forehead band which supports the basket while resting against the back. Seeds, fruits, berries, etc., are gathered in these baskets. A second form is the shallow bowl-like tray, in which foods are mixed and prepared for cooking as described above. they make a water bottle of willow, with an inner and outer coating of piñon pitch, thus rendering the bottle water-tight. It has bulging sides and pointed top and bottom and is carried upon the back, supported by means of a head band across the forehead.



Havasupai Chief.

WALAPAI

This reservation is situated in Mohave and Coconino counties, Arizona, the postoffice being Truxton, at which place passengers alight upon notification to the conductor, or at the regular stop, Hackberry, the nearest town, ten miles distant. The arrival of west-bound trains at Hackberry is at such a time that arrangements can easily be made for a drive to the Truxton Canyon Training School, the headquarters of the industrial teacher in charge of the reservation, in ample time for supper. Accommodation of a limited nature may be had at Hackberry, there being families who will gladly provide such as they can. Application for such information may be had of the Hackberry station agent.

The Walapai is a hardy, mountain-dwelling Indian and is a natural horseman, taking to the pursuit of stock-raising most naturally and easily.

They have not been to any extent corrupted by contact with civilization. Efforts are being made to induce them to adopt progressive methods of farming, and to encourage this agricultural implements have been given them.

Basketry is the only important art to be found among them. The work in this industry shows ability, the most common forms being the water bottle, made of split and unsplit and peeled



Topocobya Trail to Havasupai Village.

and unpeeled willows, and covered with a coating inside and out of piñon gum, making the jug durable and water-tight. These bottles are carried on the back supported across the forehead by means of a band. Other forms of basket-making common to the Walapai are the carrying or gathering

baskets, and the roasting tray. The carrying or gathering basket is usually large and conical, with considerable capacity. Seeds of grass, fruit of the cactus, and many kinds of berries are gathered in these baskets.

Their abodes are similar in most respects to those of many other Indians of the Southwest. The houses resemble, as a rule, an inverted bowl, and consist of bent boughs with a layer of brush, over which is placed an outer covering of canvas obtained from the Government.

The women are usually dressed in calico gowns, over which they wear a mantle consisting of four large red cotton handkerchiefs with large floral or animal designs, the edges of which form a large cross on the back. The men have adopted the costume of the white man.

MOHAVE

These interesting Indians, numbering in all about two thousand, are to be found in three localities, the majority being located on the Mohave or Colorado River Reservation. There are, however, many at The Needles, while a few are found near old Fort Mohave. Fort Mohave, beautifully situated eighteen miles north of The Needles, is now a Government Indian School. At The Needles is to be found a Harvey eating house, where arrangements may be readily made for a drive to the school. Here one can usually find accommodations extended by the official in charge. The return trip to The Needles may be made more easily by boat with competent Mohave Indians as oarsmen and pilots, in about three hours. The scenery is beautiful, the

Colorado winding its way through a broad valley, its course being apparent from the large cottonwood trees along its banks.

The only practicable way of reaching the Mohave Reservation at Parker, Yuma county, Arizona, the agency headquarters, is by rowboat under the management of Mohave Indians, or by a steamboat, from The Needles, a distance of about one hundred miles. In the summer season the trip down from The Needles can usually be made in one day, but from October 1st to April 1st two days are required. It is possible to get to and from the reservation by horseback or team from Yuma, the distance being about two hundred miles. The journey from The Needles is of great beauty and of ever-changing interest.

The Mohave are good natured, peaceable, industrious and generous to a great degree. The men are tall and finely proportioned, very few of them being below six feet in height. Their features are rather regular, their eyes large, and shaded by long lashes. The men take pride in the care of their hair, which is allowed to hang loose down the back. The women wear their hair shorter than the men. It is brushed down the back and is cut straight across the forehead near the eyebrows. They are invariably short in stature and always have happy faces. Both men and women delight in wearing upon their necks coils of blue and white beads. Shoes and hats are seldom worn. Both sexes more or less elaborately paint the face in bright colors.

Gambling is their most common vice. It is no uncommon thing for them to stake and lose every article of their wearing apparel after the loss of their money. Their homes are rude shacks, simply grass-covered sheds for summer, and in winter

mud huts. They sleep upon the ground, protected from the cold, surrounding a small fire in the center of the lodge.

They are deficient in the arts. In the making of pottery, however, they display patience, judgment and artistic taste. Ollas, bowls and dippers are made in different forms and sizes. In the manufacture of toy dolls of clay they display considerable ingenuity. Natural hair is fastened to the head, bead necklaces are placed around the necks and the faces are painted. Many of these articles, together with their



Pima Bov.



Maricopa Men.

beautiful beadwork and gaily decorated bows and arrows, are offered for sale to passengers at The Needles.

CHEMEHUEVI

This little band, a branch of the southern Paiute and of Shoshonean stock, number about two hundred, and are apparently decreasing. They live in the Chemehuevi valley about forty miles south of The Needles, a short distance

above the Colorado River Reservation at Parker, and hence may be easily visited on the journey to the Mohave. They build good houses, as a rule dress better than the Mohave, and speak some Spanish and English. Many of the men are engaged at work on the railroad, others at farming. The women are expert basket-makers, but owing to their reduced number only a few of the excellent baskets made by them are seen in any numbers elsewhere than at The Needles, where they are offered for sale to passengers. Their locality is so isolated from civilization that but very few visit it.

MARICOPA

The Maricopa Indians came from the Yuma tribe on the Colorado River and settled in a village about eight miles below Sacaton, Arizona, where they became friendly with the Pima, whom they assisted in fighting the Apache. Because of lack of water for irrigating purposes, however, they left their reservation and went to the Salt River Reservation on the south bank of the Salt River, near Phœnix, Arizona, where they now live. They number about three hundred, and are rapidly decreasing. In appearance they differ from the Pima, being taller and more muscular, and having aquiline noses. Both sexes have readily adopted the dress of the whites. The hair is parted in the middle and combed back, and is usually worn long by both sexes, but the men have been encouraged to cut their hair short and

wear hats. Their homes, to a very large extent, are curved thatched huts of saplings and brush, typical of the tribes of the Piman and Yuman stocks.

The Maricopa are monogamists, having but one wife at a time. The marriage tie, however, is not very binding. They are cremationists, and formerly burned all the belongings of the deceased with the body. The latter custom has been abandoned through official influence, as it kept the members of the tribe in a continual state of poverty.

Like the Pima, the Maricopa make very fine basket trays of willow with black designs. Pottery, in various forms of burned red clay, decorated with a glossy black, is also made. in considerable quantities. Merit is shown in both of these industries.

VIIMA

The Yuma's country embraces a portion of San Diego county, California. It extends sixty miles below and fifteen miles above Fort Yuma, which is now an Indian school and the reservation headquarters, and is built upon the Californian side of the Colorado river, opposite the town of Yuma. In full sight is Yuma City, with its quaint one-storied adobe structures, wide streets and gardens of semi-tropical vegetation.

The Yuma are tall and magnificently proportioned. Their faces are pleasant. The women are generally plump in younger years, but break down rapidly with advancing age. The hands are small, but the feet are enlarged by tramping barefooted over the heated sands. At present, nearly all dress in "store clothes." Shoes and hats are seldom worn. The coarse, black hair is arranged in long fillets and treated with the gum of the mesquite tree, maintaining the glossy condition so highly prized by them. Feathers are fastened in the hair where they flutter with every movement.

Owing to the mildness of the climate the dwellings are rudely put together. The winter house is built upon four or six cottonwood poles partially buried in the earth. The tops are notched, cross pieces inserted and the roof and sides neatly filled in



Group of Pima Indians.



Pima Habitations.

with interlaced twigs and brush. Dirt is thrown upon the top and adobe plastered over the sides. The summer house is nothing more than an arbor to protect them from the sun. Low semi-globular dwellings are made

by thrusting willow saplings into the ground, which are brought together at the top. The exterior is covered with mesquite boughs. A small semi-circular opening serves as a door. As the rainfall is wholly insufficient for successful cultivation of crops, they are compelled to rely upon the overflow of the Colorado river, which usually takes place during spring.

Like other Indians of the Colorado, the Yuma cremate their dead. The body is taken to the funeral pyre immediately after death. As the body is burning, offerings of clothing, food and other articles are thrown upon the fire. At one time the live stock of the deceased was also placed upon the pyre. The house and all of its belongings was thus destroyed. They say, "What is gone is dead, and why disturb the dead? Death is sadness, and that is what we aim to forget."

Foot and horse racing, wrestling, swimming matches and other athletic sports are indulged in almost daily. Cards and aboriginal gambling games are common. The manufacture of pottery vessels of various forms and for various uses is their only prominent industry.

APACHE-YUMA

Near the small town of Palomas in Yuma county, Arizona, on the Gila River, ninety miles west of Maricopa, is a small band of the so-called Apache-Yuma. They are non-reservation Indians, receiving no support whatever from the Government at the time the tribes of the Southwest were allotted reservations. At that time the Government placed these people upon the Yuma Reservation, where they became greatly discontented. They promised the Government if they were allowed to return

to their former locality they would never ask or expect any assistance from the Government, a promise they have kept.

It is thought by many that among these people baskets of finer construction, shapes and designs may be found than among any of the Indian tribes of Arizona; though they are now being made wholly for sale.

Piman Stock

PIMA

This interesting group of people is found on two reservations, known as the Salt River and the Gila River Reservations. The Salt River Reservation is easily reached by a short and pleasant drive over good roads through a picturesque country. The Gila River Reservation may be reached by train from Phœnix to Mesa City (fifteen miles) via Tempe, over the Maricopa, Phœnix & Salt River Valley R. R., daily, thence to the more populous part of the reservation by vehicle; or by taking the train from Phœnix to Maricopa, thirty-four miles, over the railroad last mentioned.

At Maricopa accommodation may be found at two good hotels, either one furnishing team and driver at a reasonable compensation for a drive to Sacaton, the reservation head-quarters and the Indian schools, pasing en route the famous Casa Grande ruin of the Gila. Here are the remains of three large edifices, one in a remarkable state of preservation, considering its great antiquity and the adobe material of which its walls are composed. The earliest account of the Casa Grande ruins is that of Mangi, who visited them in company with Father

Kino in 1694. The walls at the base are four feet thick and composed of a concrete of mud and gravel, very hard and capable of long enduring the wear and tear of the seasons in this equable climate. The tower or central part of the principal building is about forty feet high, and it is thought that there were originally four stories in the main body of the building.

The Pima were occupying the valley of the Gila when the white man first saw them.



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Papago Woman with Woodcarrying Basket.

in 1530, and there they have remained, a peaceable and friendly people. Their chief products are wheat, barley, beans and The women are very industrious, not only attending to their household duties, but making basket trays of unusual merit. Pottery of attractive forms, usually of red ware with decoration in black, is made by the women, with the most primitive tools. Their low, dome-shaped huts are about twenty feet in diameter, and are built of reeds and mud, thatched with tule or wheat straw. The more advanced Pima makes a comfortable house of adobe, with windows and doors.

In burial, with few exceptions, the Pima Indians wrap the body in a blanket. In excavating the earth for the grave they dig until they have reached a depth of about six feet; then they burrow under at one side about two feet, where the body is placed with some food and water. They often bury the personal belongings with the body. They then burn the house, after which the friends and neighbors kill and eat the cattle belonging to the deceased.

PAPAGO

Two reservations have been set aside for the Papago. One of about 70,000 acres lies eight miles south of Tucson in Pima county. Arizona. The other reservation, six miles square, is

at Gila Bend, in Maricopa county, Arizona, on the Gila River, about forty miles below the junction of the Gila and Salt Rivers and about forty miles west

of Maricopa. There are not more than seventy-five Papago Indians on this reservation.

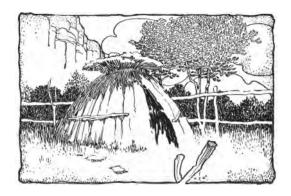
More than three centuries ago Spanish explorers came in contact with the Papago Indians, and over two centuries ago missions among them were established. On the reservation south of Tucson is the fine old mission of San Xavier del Bac, built by the Jesuits in 1668. This church, in the Saracenic style of architecture, is considered one of the most

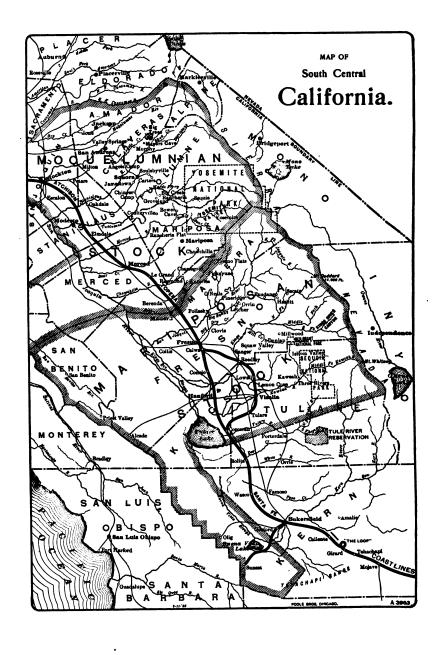
Papago Maidens at Weil.

beautiful and picturesque edifices of the kind in the United States. The front façade is richly ornamented with fanciful decorations in masonry. A lofty bell tower rises at each corner, while over the main chapel in the rear is a large dome. The interior walls are richly decorated and painted in bright colors, with many paintings in fresco.

The Papago are little below the average in stature. The women allow the hair to grow long and let it hang, braided or loose, down the back. The men all wear the civilized dress; the women also wear dresses similar to those worn by the whites, but ordinarily go barefooted. The men are truthful and reliable, and the women virtuous. They are nominally Catholics. The Papago women manufacture pottery similar to that made by the Pima and Maricopa. They also make for their own use a very attractive basket tray of willow wrappings with black designs, which is very much like the basketry of the Pima and Maricopa. Ready sale is found both for the pottery and baskets.

About two-thirds of the houses on the reservation are of adobe, the remainder being constructed of a dome-shaped framework of mesquite saplings, thatched with coarse grass or bushes. They are from fifteen to twenty feet in diameter and about six feet high, the doorway being a simple opening two feet wide and a little more in height. There are no other openings, such as smoke holes and windows. Invariably a three-pronged post, holding a large olla of porous ware containing water, is seen near each house. The water is usually cool and pleasant by reason of the slow exudation and evaporation in the dry air.







Tribes of Southeastern California

Mono — Yokutch — Tulare — Kaweah — Squaw Valley — Kings River Canyon — Mill Creek — Mono — Moqelumnian — Yosemite — Aplatchi



ITH the reminder that the tribes of southern California, usually known as the Mission Indians, are considered as deserving more extended notice in another place, we have yet to visit a number of extremely interesting bands of Indians dwelling to the east of the Santa Fe, between the Tehachapi range and the American River. All these tribes are expert basket-makers and

retain many curious aboriginal customs. They dwell in a country hardly excelled in the west for rugged mountainous beauty. As in preceding chapters, the tribes will be considered, so far as practicable, according to their linguistic affinity.

Shoshonean Stock

We may continue our journey westward, taking the Unlimited in the evening at The Needles, and leaving the train at the station of Caliente on the morning of the next day. Here we are near the foot of the Tehachapi range and about twenty-five miles south of Bakersfield. By taking a two-horse stage it is possible to reach Amalie postoffice the same day.

MONOS

These are descendants of bands of marauding Paiutes which, about a century ago, swarmed westward through the several low passes of the Sierras and conquered the Yokutch in Tulare

basin. As the Spaniards began settling Kern, Tulare and Fresno counties, the Monos gradually retreated up the rivers until at the present day we find them in wild fastnesses remote from civilization.

The word *Mono* means fly, and is a nickname, applied by the Yokutch, who say they look like flies clinging to the cliffs above. In return, the Mono call the lowland people *Talubi* or ants, as they roam about the plains below. On account of the exclusiveness of the Mono tribes, their customs and arts have been less contaminated than either the lowland or the desert people, though they have been largely modified by both these aboriginal sources. In their basketry you will find Piaute patterns interwoven with the most suitable Yokutch material. About the rarest basket found south of San Francisco comes from the people about Walkers Pass, who often use split quills for patterns, the flicker tails for red and the crow tails for an ivory white.

Mariposan Stock

YOKUTCH

Returning to Caliente the journey is continued to Bakersfield, where excellent livery service can be had. Our destination now is Rancho Tijon, with its hacienda of adobe, built in the early forties after the Mexican style. Near by are groves of citrus and other fruits, and outlying thousands of acres ascending the Coast Range slopes are well stocked with cattle. Four miles from the dwelling is Tijon pass, within whose rocky wall are sheltered the remnants of some four tribes of Yokutch, and two or more alien tribes which have wandered north from San Gabriel Mission of Los Angeles county. There are about forty individuals in all, who are compelled to use the Spanish tongue



as a medium of intercommunication. These peoples are indeed driven to the wall, where food is scant and must be continually battled for. Some fine specimens of basketry

Fresno County Women Preparing Seeds for Food.

have been obtained here, though the uncertainty of the find always adds zest to such a quest.

Returning to Bakersfield, a few hours' ride on the Santa Fe takes you to Hanford. A team may be had for a drive of ten miles southwest to a small rancheria near the shores of Tulare Lake, where is located another band of Yokutch. These people are very poor and must trust to fishing and small game, combined with the seeds from various semi-aquatic plants, for a livelihood. Their houses are generally extremely rude, built of poles thrust into the ground and covered with tule mats.

Tule Reservation

From Hanford a branch road may be taken to Porterville, Tulare county, from which point Tule River Reservation, twenty miles up the south fork of Tule river, may easily be reached within twenty-four hours. Within the reservation substantial houses may be found scattered along both sides of the river. Two miles further up the river is the residence of the Government, agent, Major Jesse Hinkle, a kind and watchful overseer of the one hundred and sixty Indians in his charge.

Every basket-lover has heard of the Tulare baskets, and here is the principal place of their manufacture. In the narrow, rocky canyon are congregated relics of five Yokutch tribes native to the adjoining plains, a few from two hill tribes and one individual, old Salt Lake Pete, whose forefathers were born at this place. Their several dialects have fused into one common medium, but each retains a certain individuality. For a perfect type of the Yokutch art, one must search for an ancient yet sprightly black squaw who can not speak English and who sucks her acorn mush from a finger spoon. Her labors, good or indifferent, are sincere, embodying the motif, the traditional essence of tribal basket lore.

Tulare Baskets

This is a term applied indiscriminately by dealers to any aboriginal ware found within two hundred miles of Tulare Lake, when as a matter of fact there are three types of basketry within this territory, each as characteristic as its makers. The Tulare basket is made by the Yokutch people only, who are native to Tulare basin and the low hills on its eastern border.



Poma Basket Weaver.

It is a tightly bound coil of a rich ecru color, whose bichrome patterns of red and black are inwoven in horizontal bands. Vertically grouped patterns are unusual, and spiral patterns are not found. Jay bird or quail crests are usually found ornamenting the peripheries of vase-shaped baskets; also a fringe of red yarn. A favorite Yokutch pattern, both here and on Kings and Kaweah Rivers, consists of one or more

bands of concentric diamonds, symbols of the markings on a rattlesnake. Another pattern commonly seen is a circle of human figures dancing around the body of the specimen. A third type comes from the Paiutes of Inyo county, in which is a willow background, of color according to age, ranging from a woody white to mahogany, with sooty patterns woven either from charcoal dved strips of willow or from pods of the devil's thorn. Good specimens from this source are not at all common, especially those having quill work, and are desirable more for their rarity than for their beauty. The third and by far the most prolific source of the so-called "Tulare basket" is the Mono. This type is a close woven, firm, thin walled coil of creamy (because young) carex roots, with patterns in which black and several shades of red usually predominate. The tall bowls from eastern Kern county beautified by polychrome designs, either vertical or spiral, are probably the most esthetic product of the North American Indians, and in this comparison are included the superb work of the Poma in Mendocino county, California. In methods and weaving techic the Poma are peerless, but as their symbolism is confined to monochrome (feathers not considered), much is lost in artistic effect.

The simplest and more commonly seen symbol among the various Mono tribes is a black wavy line encircling the basket.

Kaweah

From Porterville the train takes you up the valley in two hours to Visalia, the county seat. Twenty miles eastward takes you over a level road through Lemon Cove, with its citrus orchards, across the Kaweah River and to a cluster of Yokutch cabins perched on a hill beyond. One may not find much, yet some handsome things have come from this region. Pottery and stoneware are in common use.

Squaw Valley

You have now the choice of returning to Visalia or going northward over fair mountain roads by a much more circuitous route. This latter will repay you, for within a few hours you reach Squaw Valley, see the little Yokutch rancheria in its western edge, thence passing down to Mill Creek and up its stream to Dunlap and Millwood. Within a few miles of the mill are the homes of a tribe of Monos. They are fine weavers, and samples of their work may be had.

From Millwood eastward, up the mountain overlooking Kings River, is a fine new Government trail leading to the wonderful Kings River Canyon, a place comparatively little known, but a most stupendously wild and deep rift in the Sierras, made by prehistoric glaciers, a rival in many ways—perhaps the peer of Yosemite. One dome reaches five thousand feet, apparently perpendicular above the bank of Kings River. An expert explorer can by judicious labor ascend a branch of this stream to its source on the summit of Mt. Goddard at an altitude of fourteen thousand feet. A rude but comfortable hotel is now open to tourists in the Great canyon, and good fishing and hunting may be found.

Mill Creek

The return must be made by the same route as far as Squaw Valley. There you are within easy reach of a railroad; for going west you descend rapidly to the plains, across Kings River bridge to Sanger. However, you may wish to go a little out of the way, before reaching the bridge, by turning north and following up this noble river to the mouth of Mill Creek, the home of about thirty-five Yokutch Indians. The usual routine of Indian

life is somewhat broken at this camp. They have lived too long by the side of ranches not to have adopted many white man's customs. Over the aboriginal red nature there has accumulated a thick coat of civilized whitewash. A number of their women weave baskets for the market, and as a rule they are fair representative specimens, but fine Yokutch types are exceptional.

While on a trip of this kind do not forget to sample the various aboriginal foods before you. They are as a rule perfectly clean and nutritious, and some are delicious to a hungry man. Squirrels are drawn and thrown into the embers till thoroughly singed, then roasted in hot ashes. A fat ground-squirrel prepared thus is much like the eastern "possum." Braized rabbit with acorn mush is really excellent eating at times. Toasted laurel nuts eaten with fresh clover are not at all bad, while manzanita cider, made in your presence in truly Indian style, and flavored with charnit seed meal is a drink both gratifying and unique.

Mono (Shoshonean)

At Visalia you take a stage northward on a longer and more adventurous trip, via Letcher postoffice, about twenty miles distant, near which are a few valley Indians. Mr. William Hogue can here furnish outfit with guide and pack animals, when the journey is continued to Burrough valley, twelve miles further to the east, all over excellent roads. From this valley you begin a rough but delightful climb about the mountains frowning over Sycamore, Fandango, Big, Haslett and Secate creeks. Along each of these streams, separated by lofty ridges, are small sequestered valleys occupied by Monos, where the sight of a white face is very rare, and a wagon unknown.

There is not a spot in California more beautiful than Fandango Cove. Its natives are friendly in manner and primitive in habits, and they listen to the English language with the curiosity and naiveté of children. Secate Basin is only about twelve miles, as the crow flies, from Millwood, but a world of canyons and impassable streams, notably Kings River, lie between, thus compelling a long detour.

Jose is part of that strip protected by the Government, extending along the Sierras through more than a half dozen

counties, and called the Forest Reserve. Its sanctity is secure against the ravages of the ax and the shepherd, presenting to the Monos a haven of security and an abundance of nature's foods. In a cove somewhat less tilted than others along Rushing creek are about fifty descendants of that band of Paiute invaders which came over through the San Joaquin pass. They are unusually primitive in habits, civil, but guarded toward strangers. Among them are two ancient bow makers. A few



Tulare Woman Milling, Tule Reservation.

also understand the art of making stone pots and cider tureens of oak, while nearly all the women weave baskets. The red bud does not grow well at this altitude, hence monochrome patterns are the rule, but wonderful effects are produced with the brake root in skilled hands, as some specimens from this place have proved.

A good road begins two miles from Jose village up the slope and strikes the county road near Orrin postoffice on the ridge, but a nearer and more picturesque route is the mesa trail westward along and overlooking the Great canyon. After seven miles of pine forests and chaparral thicket you come upon a bench, and isolated huts begin to appear. Investigation may handsomely reward any curiosity as to their contents. On rounding a spur two miles further, the trail is diverted by a side canyon, across which houses are seen on the hillside. Heading the canyon, you emerge from the forest suddenly into another Mono village. Scattered within a mile's radius are more huts, and to the west on the main road is the Big Sandy village.

You are now within fifteen miles of Letcher postoffice, your starting point. Here you have a bird's-eye view of the plains around Fresno. The return to civilization is a matter of a few hours, or another expedition very similar to that just finished will take you northward into Madera county. Consult your guide and if your pack is short in any respect, you may go on via Auberry valley, see the few Yokutch on Tule Mountain and

refit at the town of Pollasky, the terminus of a branch railroad. Billy Walker lives there, and can drive you all over Madera county behind his thoroughbreds. A start from Big Sandy, however, has fifty miles advantage over the detour mentioned, and the road at once plunges down the mountain to the right from Hoskin's ranch to the San Joàquin River. The bridge across the river is wooden, and held up by four great chains anchored to either bank. Like many other rivers, parallel to this one, crossings are difficult because of the extreme depth and the swiftness of the current, thus rendering boats and ferries impracticable, while bridges are rare. The Indians cross by means of a cable made from the bark of the Fremontii Californica tree, stretched just above the water, and along which they cling and pull themselves across. Such a cable bridge is still in use further up the river.

The trail leaves the road near the chain bridge and turns sharply northeast, until, after a three miles' climb, it passes over a ridge and along the North Fork. The Monos in the neighborhood are much scattered, living only on spots where alluvium and water can be found for their truck gardens. The trail continues eastward near the range summit, parallel with the river, which is in view almost continually some four thousand feet down the slope, till a crest shuts out the grand panorama to the south and walls one in by the dense foliage of spruce, pine, oak, cedar and multitudes of flowering shrubs which continue for miles, emerging suddenly into a clearing with its farm houses. Cal Ross has lived here almost alone for forty years, his only neighbors being the Indians. The rancheria is a short distance away and deserves several days' stay to visit the dozen or more houses. Just over the ridge, east four miles, is another large village of Monos, which, in rude primitiveness, is typical of the villages of these mountain peoples. Near by is the Ross



Mrs. Hallock, who will give you a substantial welcome. There are few spots on earth more grateful to the eye, nose and lungs than this warm, dry, light air, sweet with balsamic breezes and the songs of birds.

Mono Woman Harvesting Seeds.

Grass and flowers are perennial. Wild game is often seen and every large stream holds rainbow trout. Across the great canyon to the south rises Mt. Kaiser to the height of eleven thousand feet, and to the northeast Mt. Shuteye and its fellows. A fair trail passes east by Jackass Meadows, Devil's Post Pile, and over the Sierra range by Mammoth Hot Springs into Mono county among the Paiutes.

The return from Ross ranch to a railroad at Pollasky can be made in a day, but after seeing the Monos



Mono Basket Prizes Won at Gambling.

around the town of North Fork you may again turn northward at Fine Gold, and find comfortable quarters at the hotel at Coarse Gold. The little valleys in the neighborhood hold one or more Indian families and Pickayunne, three miles away, is a village of Yokutch people of the Chukchansi tribe, refugees from their old home, further toward the plains. They present a contrast to the Monos, being larger and darker, more taciturn and sophisticated in civilized methods. You are now on graded country roads and meet teams and white people almost hourly. The town of Fresno Flats is eight miles to the north and near Beso, a collection of Indians akin to those at Pickayunne; several miles further north you strike the Yosemite stage road and stop at Ahwanee station, where the best awaits the tired and hungry.

Your guide now may have wandered beyond his ken; so telephone to Raymond for Tom Leonard and his buckboard. He knows every Indian this side of Sonora and the shortest way to reach him. In the meanwhile you may visit a number of camps in the neighborhood, especially those on Chowchilly River, where, side by side, live a few Yokutch with frontier members of the once warlike Miwok tribes.

Moquelumnian Stock

The Chowchilly River forms the southern boundary of the Miwok or Moquelumnians, whose territory once extended northward beyond San Francisco Bay. Their language and basketry present a striking contrast to that of both the Yokutch and Mono. The coarse twine-woven utensils for house use continue about the same, but the coil weaves are thick-walled, heavier and more ponderous than those of any other Indian family living north of Tehachapi pass. No delicate, flexible weaving materials are indigenous to the soil, such as carex, thus compelling the use of chaparral and other comparatively coarser wefts. The word handsome describes the best examples of Miwok work, found in great ceremonial tubs and tureens, three feet in diameter and configured in red bud bark, with symbolic patterns.

Awahnee is about a day's ride from Yosemite, but by going on direct you will miss four important tribal settlements of the Miwok people, near the town of Mariposa. The county road to Mariposa requires a day's travel and another day may be profitably spent on Bear creek and around Rancheria flat. Passing north through Bear Valley and across the Merced River by the usual slide-down and climb-out process so picturesque to the tourist and exhausting to teams, you reach Coulterville before bedtime.

Yosemite

From Coulterville, a point on the daily Yosemite stage line from Merced on the Santa Fe, the graded stage road climbs eastward for six miles to a ridge. On descending, the first view is caught, perfectly outlined in the blue haze, of the great walls of Yosemite fifty miles ahead. This road emphasizes the characteristics of the Sierra's highways, being a succession of long climbs around the slopes of pine clad ranges, sharp descents into apparently bottomless gorges and occasionally a level stretch across a meadow. At Bowers Cave station a turn to the right leads down to Bull Creek five miles, to a colony of thirty Moquelumnians. Among them are two Awanichi, almost the sole survivors of that tribe once owning Yosemite Valley, and



Moquelumnian Ceremonial House, Big Creek, Tuolumne County.

who so fiercely defended their homes to the last. During the tourist's season the Bull Creeks nail up their huts and move in a body into the great valley, finding

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ready sale for their beadwork and other relics, while the men supply the hotels with trout at good figures.

After miles of corkscrew descent the last grade faces a wall of granite on one side and on the other overlooks the torrent of the Merced River. As the valley floor is gained at its lower end, several miles further, the view opens upon the most stupendous region in California.

A band of Monos cross the Sierras every year and bring in a pack train of their wares to sell to tourists, and it is curious to see the meetings between the Moquelumnians and their hereditary enemies. Time and the white man have forced a peace between them, a neutrality marked by excessive suavity, but with a heart of bitterness to the end.

Aplatchi

It is about fifty miles by stage from the valley to Groveland Hotel, and two miles distant is Big Creek rancheria, the home of about forty Indians who belonged to tribes once living within a half day's ride to the south. As the majority of these people belong to the Aplatchi tribe from the lower Merced, they have placed their hereditary chief, known as Captain Tom, in charge of the entire settlement. The dialects of the several tribal mixtures have become blended into a common medium of speech. In the center of the village stands a council house, built of sawed lumber, with modern tools, yet resembling in form their ancient hung-y, which was constructed by planting a circle of forty-foot long poles and bringing their upper ends together, thus forming a cone. Layers of pine bark over these

insured a warm, dry, and well-ventilated house. The only means of ingress was a covered hallway or tunnel on the west side, a kind of double door. This style of architecture prevails with slight variation throughout the Sierra and Cascade Mountains and answers the Indians' needs far more effectually than any product of civilization. Nearby is an acorn crib, thatched with grass and, as usual, set up on stilts to keep out rodents. The same type of baskets is



Harvesting Manzanita Berries, Mono, Hookers Cove, Madera County.

found here as among the other Miwoks, and the same opportunity is afforded of finding a stray piece of Mono work or even a fine specimen of lowland carex wefts.



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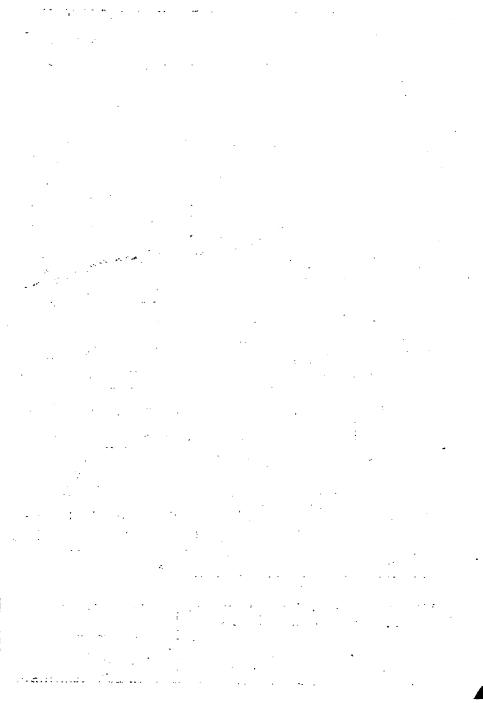
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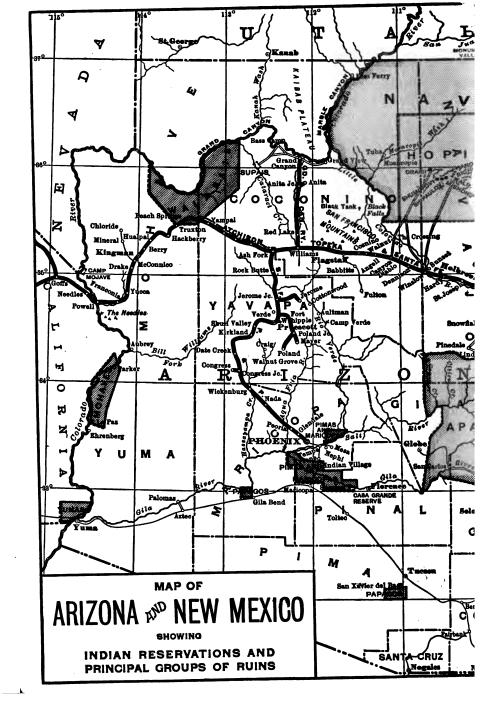
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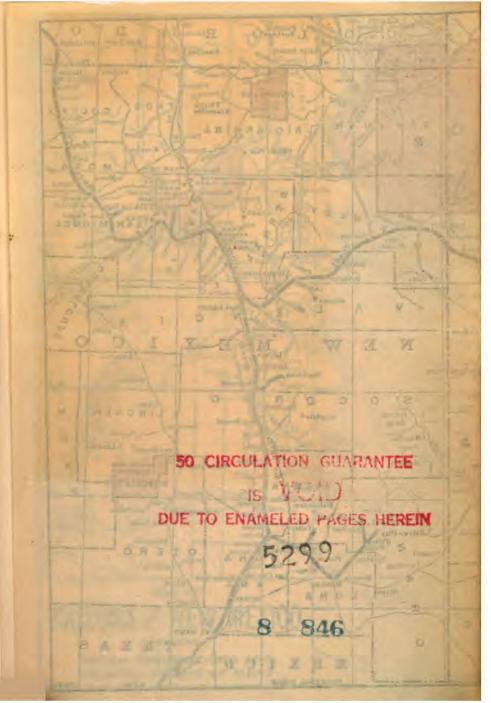
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